OTTER CREEK PROPERTY SUMMARY REPORT

Volume I of II

ENERGY, MINING, AND ENVIRONMENTAL CONSULTANTS

NORWEST CORPORATION

OTTER CREEK PROPERTY SUMMARY REPORT

Volume I of II

Submitted to:
GREAT NORTHERN PROPERTIES, L.P.

and:
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

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EXECUTIVE SUMMARY

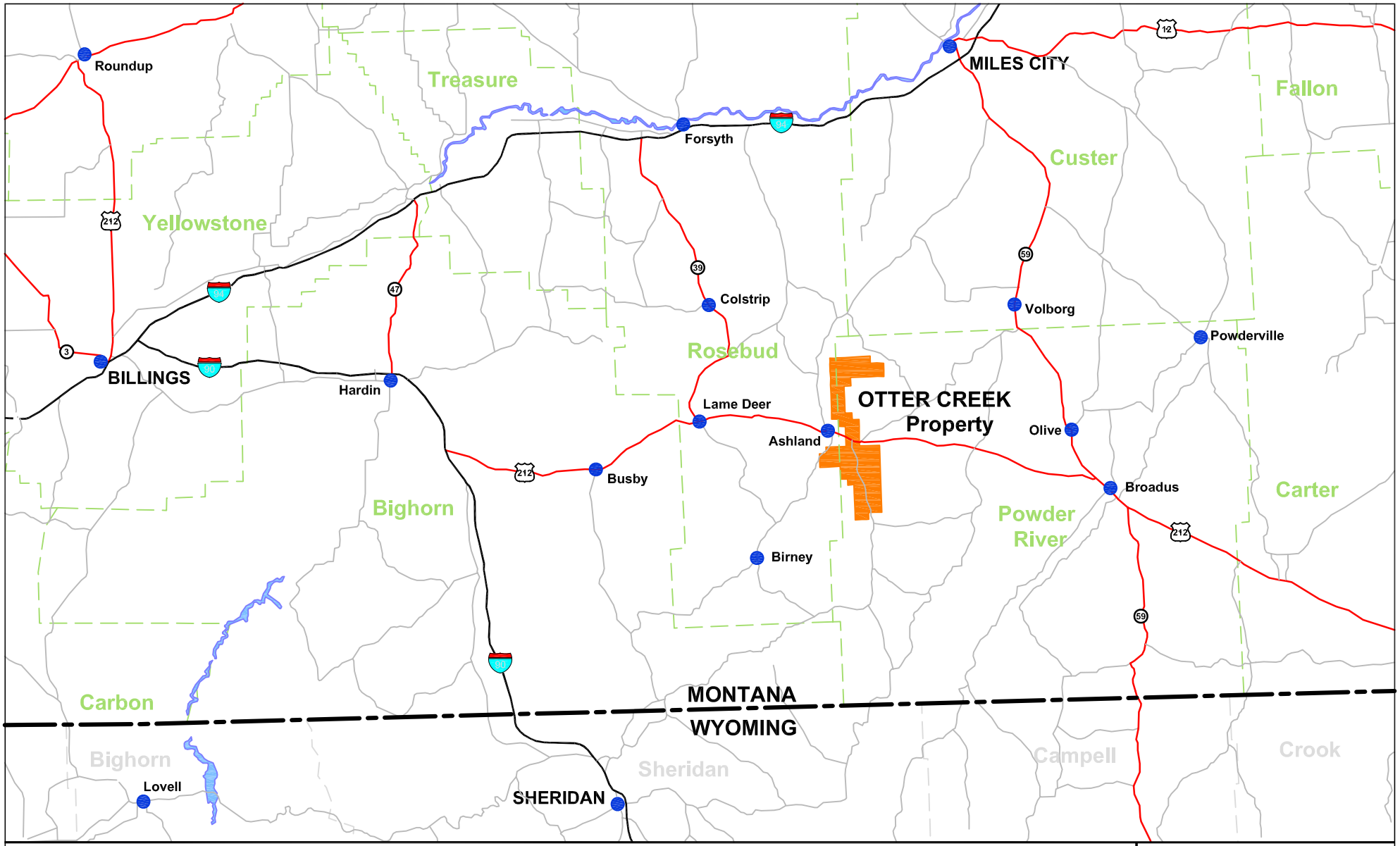
Norwest Corporation (Norwest) was contracted by Great Northern Properties L.P. (GNP) to analyze and interpret existing data regarding coal properties controlled by GNP and the State of Montana, collectively referred to as the Otter Creek Property. The Otter Creek Property covers a large area within Powder River and Rosebud counties, Montana. The tract trends north to south and encompasses over 100 square miles of land.

The overall project objectives consisted of updating the geologic model and resource estimates, identifying specific logical mining units (LMUs), preparing documents that describe each LMU in terms of geology, available resources, coal quality, mineability, strip ratio and range of expected mining costs. An additional objective of this study was to assess the vertical variation of sodium in the Knoblock Seam and to assess the opportunity for selective mining in order to minimize variations in coal quality.

The Otter Creek Property is located in the Ashland coalfield east of Billings, Montana. The Otter Creek Property is located in Rosebud and Powder River Counties, Montana. The general location of the property is shown on Figure E.1.

GNP coal resources are located within the boundaries of the Custer National Forest and comprise alternating sections of property held in fee by GNP and public domain property held by the State of Montana.

The coal resources of the Otter Creek Property have been the subject of several investigations starting in the mid 1970's. This has resulted in numerous data sets developed by several corporate and government entities.



LEGEND

- Interstate
- Principal Highway
- Other Roads
- State Line
- County Line

MONTANA
Otter Creek Property

N

0 10 20 30

1" = 20 MILES

Great Northern Properties, LLP

Figure E.1
Otter Creek Property
Location Map

DATE: 08/01/2005
FILE: 3187Location
PROJECT: 3187
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The geologic data collected during the various programs amounted to more than 460 drill holes – these were utilized to characterize this resource.

The quantity of drilling that has been completed on the Otter Creek Property is sufficient to reasonably estimate overall coal tonnages in most areas within the property. The overall in-place resources are estimated at about 4.3 billion tons.

The coal averages 8,500 to 8,600 BTU/lb on an as-received basis. The high moisture content, which averages 27.5% to 28.0%, is fairly typical of Powder River Basin coals. The sulfur content of the coal is very low and with few exceptions the coal is classified as compliance coal, producing less than 1.2 pounds of SO_2/million BTU. The ash content of the coal is also low. The sodium content of the ash is considered high and averages between 6.0 and 7.0 percent.

Mine planning indicated the six discrete LMUs which are summarized in the table below.

Table E.1 LMU Summaries

LMU	Recoverable Tons (millions)	Moisture % (As-received)	Ash % (Dry Basis)	Sulfur % (Dry Basis)	Btu/lb (Dry Basis)	Sodium in Ash % (Dry Basis)
1	346	28.6	6.9	0.3	11,940	6.8-6.9
2	556	28.2	7.8-8.6	0.3-0.4	11,800-11,900	5.7-6.4
3	241	24.3	6.8	0.3	12,000	8.8
4	266	27.4	6.8	0.3	11,700-12,000	7.0-7.9
5	901	28.4	7.0-8.5	0.3	11,800-12,000	6.4-7.1
6	507	28.7	7.2-8.3	0.3	12,600	8.7-8.3

The coal quality data was analyzed to identify vertical variability within each major bench of the Knoblock seam. This indicated the following:

- An inverse relationship exists where the sodium content of the coal ash generally increases as the ash content decreases.
- Sulfur content however, is elevated in the top portion of the Upper Knoblock seam.
- Ash content is the highest in the top portions of all of the coal benches.
- The Upper Knoblock Seam is generally slightly lower in ash content and higher in Sodium Oxide than the lower portions of the Knoblock Seam.

Coal quality control programs and blending will likely be required during mining operations in order to maintain consistent product quality.

All LMUs are amenable to surface mining using draglines and truck-shovel fleets for overburden removal. These techniques are used at other mines in the region including Absaloka, Decker, Rosebud, and Spring Creek Mines. The smaller LMUs will require 70 to 80 cubic yard (CY) capacity draglines while the larger LMUs will need 110 to 120 CY draglines. The combined LMUs will require two draglines. For LMUs 1 through 4, the truck-shovel fleet will consist of 25 to 30 CY hydraulic excavators or shovels and 190 to 240 ton trucks.

When it is necessary to meet the customer's coal specifications, if may be possible to selectively mine the coal to improve the coal quality. The selective mining process removes zones within each seam that are usually higher in sulfur or sodium thereby resulting in a higher quality product.

The following table lists the production rates selected for the LMUs:

Table E.2 Production Rate by LMU

LMU	Yearly Production Rate (Tons)
1	8,500,000
2	12,700,000
3	6,000,000
4	6,000,000
5	21,200,000
6	12,000,000

Norwest developed an indicative mining cost estimate[1] for each LMU based on unit mining costs derived from actual and projected mining costs from mines having similar mining conditions. The average life-of-mine costs for the six LMU range from $6.69 per ton to $7.65 per ton. We also developed scoping capital costs for each LMU.

Montana coal, the Northern PRB, is noted for its heating value that is higher than most of the Southern PRB mines, its varying sulfur levels and its higher sodium levels. The sodium content of Otter

[1] Norwest recommends that additional engineering be performed to further refine the operating (and capital) costs.

Creek coal ranges from 5.8% to 8.8% and is high in comparison to other coals in the western US. but about the same as other Montana PRB mines. For example: coals from the southern Powder River Basin of Wyoming typically average 1.2% sodium while currently produced coals from Colorado average about 2.5% sodium. Sodium in ash can cause slagging problems in certain types of boilers in electric generating plants. As a result, most plants avoid burning high sodium coals. However, we have identified ten power plants within the competitive area for Otter Creek which currently accept higher sodium coals. These plants would likely constitute the initial target market for Otter Creek coals. The information and data used to assess the marketing is derived from FERC data. It is, from our experience, the best data available but not much audited for accuracy of reporting nor input into their database and perhaps even suspect. Nevertheless, we were able to estimate current FOB prices for coal similar to Otter Creek.

It should be noted that the volume of coal shipped from Montana to the high sodium-accepting power plants is only about 20 million tons per year. Careful effort developing a solid market strategy will be necessary to determine how best to nudge into this market without destroying whatever price discipline, if any, currently exists. All Montana mines have been operating for many years and are experiencing higher stripping ratios in the range of 3-4:1 at Spring Creek, climbing up to 9:1 and higher at Decker. These higher strip ratios put these mines at a disadvantage with respect to Otter Creek's projected operating costs, as they each must move more waste to uncover the same amount of coal as at Otter Creek. This higher cost, however, will be offset by Otter Creek's higher capital recovery / depreciation costs.

At present there are no established transportation links to the Otter Creek property. We assessed the options of rail and truck transportation to the rail spur to the line at Colstrip, located about 38 rail miles distant. From Colstrip the trains would continue on to their final destination. While the rail option has a higher initial capital, this is offset in only a few years by the reduced transportation costs. Therefore, we recommend the rail alternative.

INTRODUCTION AND OBJECTIVES

Great Northern Properties L.P. (GNP) has contracted Norwest Corporation (Norwest) to analyze and interpret existing data regarding coal properties controlled by GNP and the State of Montana, collectively referred to as the Otter Creek Property. The Otter Creek Property covers a very large area within Powder River and Rosebud counties, Montana. The tract trends north to south and encompasses over 100 square miles of land.

The overall project objectives consisted of updating the geologic model and resource estimates, identifying specific LMU's, and to prepare documents that describe each LMU in terms of geology, available resources, coal quality, mineability, strip ratio and range of expected mining costs. An additional objective of this study was to assess the vertical variation of sodium in the Knoblock Seam and to assess the opportunity for selective mining in order to minimize variations in coal quality.

As part of this study, Norwest was required to build independent geologic and coal quality models. The key geologic components and tasks associated with preparing the models and satisfying the objectives of the study were established as follows:

- Prepare and merge two separate drill hole databases into one consolidated stratigraphic and coal quality database.
- Construct correlation charts to ensure that the merged data sets conform to the same stratigraphic nomenclature and that seam correlations were correctly identified.
- Prepare digital surfaces of the seam structure, thickness and basic coal quality parameters.
- Upon completion of the digital surfaces, prepare maps locating the position of the seam outcrop, subcrop and weathered surfaces.
- Create a geologic model of the coal resource area and calculate the coal tonnage and overburden volumes of the in-place resource.
- Identify the quality distribution of the coal both laterally and vertically within the seams.
- Assist with identifying LMU's that could be developed within the property.

This report summarizes the geologic modeling, resource estimates and coal quality characteristics. This information will form the basis of future LMU delineation and mineability studies.

GEOLOGY AND COAL RESOURCES

LOCATION, TOPOGRAPHY AND LAND USE

The Otter Creek Property is located in the Ashland coalfield east of Billings, Montana. Access to the property from Billings is available by traveling east on Interstate Highway 90 to the town of Crow Agency in the Crow Indian Reservation. From that point access is provided by traveling east on U. S. Highway 212 to a point four miles east of Ashland, Montana. Final access to and through the property is provided by traveling south on Otter Creek Road, an improved all-weather dirt road that leads from Highway 212 to the town of Otter, Montana at the south end of the Otter Creek Property as shown in Figure 2.1. Numerous unimproved dirt (2-track) roads provide local access within the Otter Creek Property.

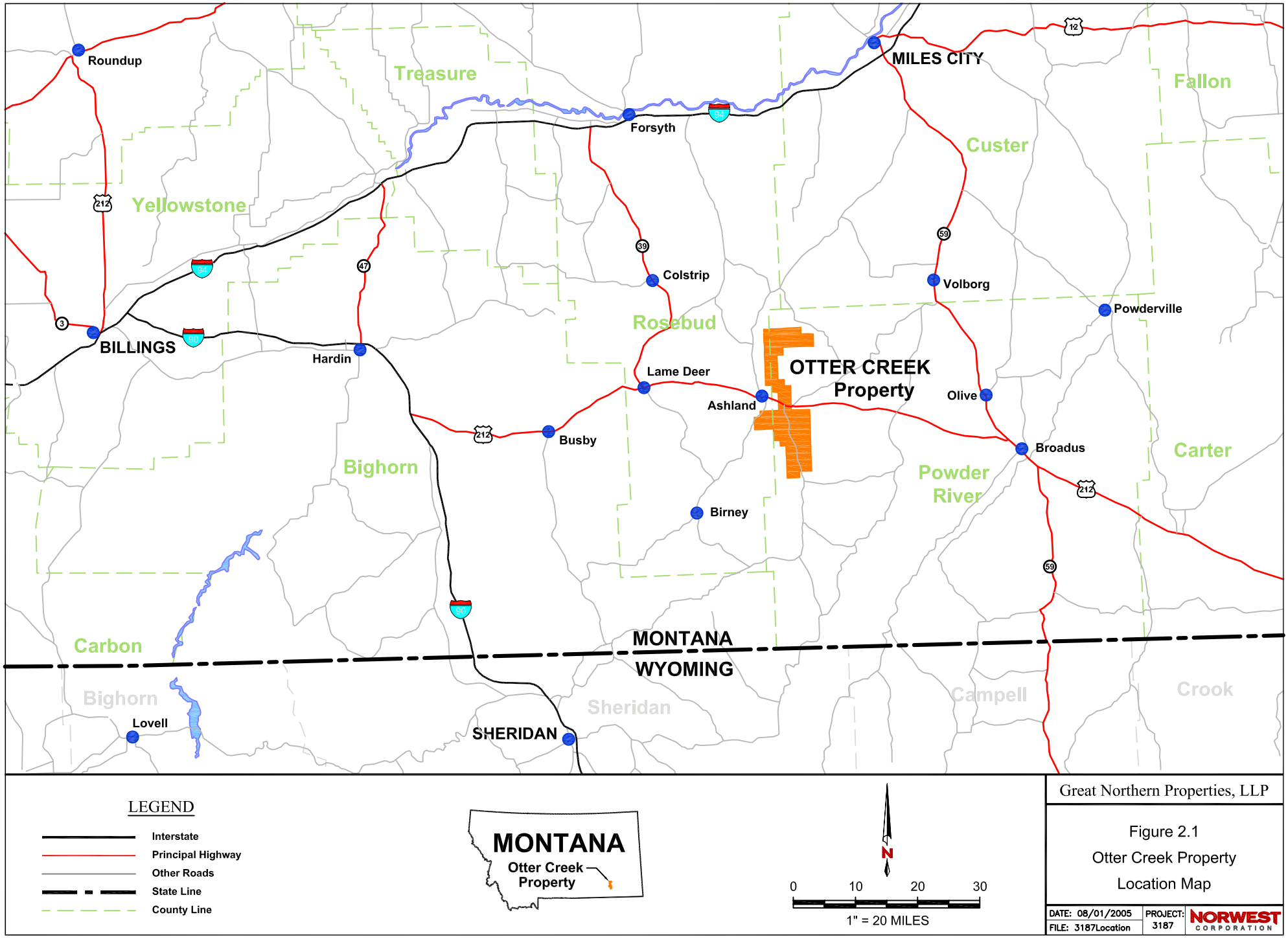
The Otter Creek Property is located in Rosebud and Powder River Counties, Montana. It is within the boundaries of the Custer National Forest but is comprised of alternating sections of property held in fee by GNP and public domain property held by the State of Montana. Coal ownership is illustrated in Appendix A, Map A2.1.

Topography in the area of the Otter Creek Property is characterized by rolling hills separated by broad valley regions. The rolling hills are covered by plains grasses and provide excellent rangeland for ranching and habitat for wildlife. Elevations within the property area range from less than 3,000 feet above sea level along Otter Creek that flows in a general north-south direction through the center of the property, to over 3,400 feet on the bluffs that flank Otter Creek.

DATA AND METHODOLOGY

Data Sources

The coal resources of the Otter Creek Property have been the subject of several investigations starting in the mid 1970's. This has resulted in numerous data sets developed by several corporate and government entities. Early investigations include drilling conducted by the Montana Bureau of Mines and Geology, Consolidation Coal Company, City Services, and GNP.


Roundup
Treasure
MILES CITY
Fallon
Forsyth
Custer
Yellowstone
Colstrip
Volborg
Powderville
Rosebud
BILLINGS
Hardin
Lame Deer
OTTER CREEK
Property
Ashland
Olive
Busby
Broadus
Carter
Bighorn
Powder
River
Birney
Carbon
MONTANA
WYOMING
Bighorn
Sheridan
Campell
Crook
Lovell
SHERIDAN
LEGEND
Interstate
Principal Highway
Other Roads
State Line
County Line
MONTANA
Otter Creek
Property
N
0
10
20
30
1" = 20 MILES
Great Northern Properties, LLP
Figure 2.1
Otter Creek Property
Location Map
DATE: 08/01/2005
FILE: 3187Location
PROJECT:
3187
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Most recently, in 2004, Kennecott Energy and the State of Montana initiated an exploration program that included the drilling of 54 holes of which 42 were core drilled providing for coal samples that were analyzed for their quality.

In addition to the drill hole data, regional geologic information was used from published reports by the U. S. Geological Survey.

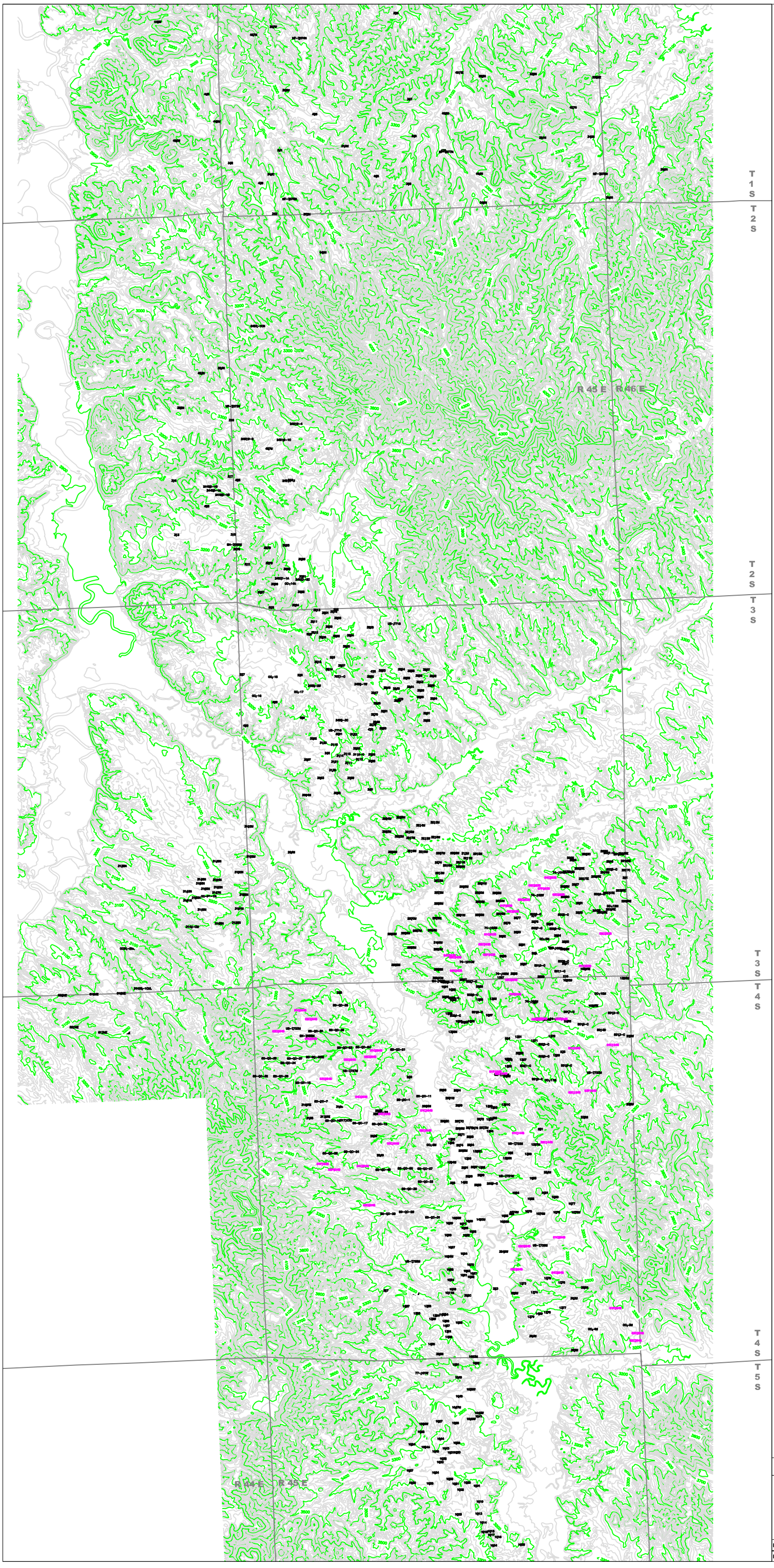
Nature of Geologic and Coal Quality Data

The geologic data collected during the programs described above have been provided to Norwest in electronic format. Several database files have been made available that contain pertinent information regarding the drill holes including hole location information, down-hole information including seam intercepts, coal thickness, in-seam rock partings, and coal quality data. In addition to this information, electronic copies of drill cutting and geophysical log records have been provided for many of the drill holes.

The exploration programs that have been conducted on the Otter Creek Property have provided extensive drill hole data that defines the coal resource potential of the property. The distribution of the drill holes that have been completed on the Otter Creek Property to date are shown in Figure 2.2 and Map A2.2.

All of the information provided to Norwest has been used to assess the accuracy of the data and to evaluate the resource potential of the Otter Creek Property.

As illustrated, over 460 drill holes have been utilized to characterize this resource. The distribution of drill holes across the property is uneven, with many concentrated in the central and southern portions of the property and generally fewer holes and more widespread coverage in the north. Additionally, there are many areas throughout the property that will require substantial drilling to accurately delineate the coal subcrop and burned zones.



LEGEND

- GNP DRILL HOLE
- 2004 DRILL HOLE
- TOPO

N

0 1000 2000 3000 4000 5000
FEET

OTTER CREEK PROJECT

Figure 2.2

TOPOGRAPHY AND
DRILL HOLES

DATE: 6/20/2005	SCALE: 1"=4000'
DRAWING: TOPO	DRAWN BY: XU

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Data Accuracy and Adequacy

Although the data provided to Norwest was in electronic format, it was in several different forms such as drill cutting/core logs, scanned geophysical logs, digital "las" files and tabulated drill hole data. This has allowed Norwest to make cross checks between the data represented on the cutting/core logs and geophysical logs with the various files of tabulated drill hole data. Where available, the data on the drill logs were compared against the tabulated data. This comparison indicated that the tabulated drill hole data were accurate and represented the data provided on the drill logs in their various forms.

The coal seam correlation and nomenclature used in the various data files were compared and checked to insure that the final data files were consistent in the seam correlation and in the naming of the seams present.

Geophysical logs were provided in electronic (las) format for holes drilled in 2004. Plots of these logs were prepared using Norwest's "Pinnacle" in-house geologic software. Top and bottom depths of the coal seams shown on the logs were determined by selecting the mid-point on the deflection of the resistivity and gamma-gamma density log traces. These depths were compared with those listed on the tabulated data and it was found that the resulting coal thickness measurements listed on the tabulated data understate the coal thickness by an average of 1.5%. This suggests that the coal thickness measurements used in this report are slightly on the conservative side.

It is important to point out that the most reliable method of measuring coal thickness penetrated in a drill hole is through the analysis of geophysical logs. Coal thickness derived from core measurement is usually limited in accuracy by frequent crushing of the core and by core loss.

Methodology

After all drill hole data had been checked for accuracy, it was combined into two master Excel files. One file contained coal depth and thickness information and the other file contained coal quality data. These files were then used to develop the geologic model utilizing Carlson Engineering's SurvCADD XML modeling software.

GEOLOGY AND MODELING RESULTS

The data files created by Norwest, described above, plus published data on coal deposits of the region enabled the development of a digital geologic model that accurately characterizes the coal resources present within the Otter Creek Property. The following section describes the coal deposit contained within the Otter Creek Property and the geologic model generated that represents these deposits.

Structure and Overburden

The Otter Creek Property lies in a region of the Powder River Basin that is structurally stable. No known faulting is present that dissects the coal seams within the property. The coal beds are nearly flat or gently dipping more as the result of depositional loading rather than tectonic deformation. The coal beds within the Otter Creek Property are very flat-lying having an average dip of one degree or less. Maps A2.3, Knoblock Seam Top Structure, and A2.4, Knoblock Seam Bottom Structure, illustrate the gently rolling structure of the property. These drawings, along with others that illustrate the geologic model, are presented in Appendix A of this report.

Stratigraphy

The coal seams of economic interest within the Otter Creek Property are contained within the Tongue River member of the Fort Union Formation of middle Paleocene age. The primary coal seam within the Otter Creek Property is the Knoblock (K) seam. This coal seam ranges in thickness from 19 feet to 75 feet and averages approximately 59 feet. The seam splits into two sub-seams, the Upper Knoblock (UK) and the Lower Knoblock (LK), in the southern and northern portions of the property. The Upper Knoblock splits again into two sub-seams in the extreme southern portion of the property. The upper sub-seam of this split is called the Upper Knoblock 2 (UK2) seam while the lower sub-seam is called the Upper Knoblock 1 (UK1) seam. Figure 2.3 below illustrates the relationship of the coal seam splits. The correlation of the sub-seams in the areas where the Knoblock splits is well defined by the drilling that has been completed.

Map A2.5 Drill Hole Correlation Charts, located in Appendix A, illustrates the relationship of the sub-seams within the property. It is important to point out that the thickness represented on the Isopach map represents the same interval used in the quality modeling for a given drill hole. Intervals of bone coal near the top or bottom of the coal seam were excluded in the thickness used to develop the Isopach map.

Great Northern Properties, LLP

Figure 2.3
Otter Creek Property
Generalized Cross-Section

DATE: 08/01/2005
FILE: KnoblockSeamXSec
PROJECT: 3187
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The Knoblock seam is thickest in the central area of the Otter Creek Property as shown on Map A2.6 Knoblock/UK/UK2 Seam Isopach. Also shown on this map is the thickness and extent of the Upper Knoblock 1 and 2 seams. In the northern area of the Otter Creek Property where the Knoblock seam is split into two sub-seams (UK and LK), the thickness of the parting or interburden that separates the two sub-seams generally increases in a northerly direction. Likewise, in the southern portion of the property, this interburden increases in thickness in a southerly direction. Map A2.7, illustrates the thickness of this interburden. The coal thickness of the Upper Knoblock 1 seam, the Lower of the sub-seams formed by the splitting of the Upper Knoblock seam in the extreme northern and southern portions of the property, is illustrated on Map A2.8, Upper Knoblock Seam 1 Isopach. The thickness of the interburden that separates the Upper Knoblock 1 seam from the Upper Knoblock 2 seam is illustrated on Map A2.9. The thickness of the Lower Knoblock seam, present in both the northern and southern portions of the Otter Creek Property, is illustrated on Map A2.10.

The coal seams present are covered by overburden consisting of interbedded fine-grained sandstones and mudstones. The thickness of the overburden is variable due to topography in the area. The overburden thickness has been modeled by subtracting the elevation of the top of the coal seam from the topographic elevation. This overburden thickness is illustrated on Map A2.11 Knoblock Seam Overburden Isopach.

Outcrop, Zone of Weathering and Burned Coal

Outcrops of the Knoblock seam and sub-seams are present on both sides of Otter Creek, which flows in a northerly direction through the center of the property and exits the property's western boundary near the town of Ashland. A zone of weathered or burned coal normally exists where the seam is found at near-surface depths. This zone of weathering was identified from observations recorded in drill hole lithologic logs. The zone's thickness is variable and ranges from as little as five feet in the southern portion of the property to over 150 feet in the northern portion of the property. After the zone of weathering had been identified in all of the drill holes, the zone was modeled by preparing a thickness grid. This thickness grid was then subtracted from the surface topography which resulted in an elevation grid representing this "weathered surface". The "weathered surface" is illustrated on Map A2.3, Drill Hole Location Map and Coal Seam

Correlation Cross-Sections. Where the modeled zone of weathering intersected the coal seam, the limit of that coal seam was trimmed to the base of the weathered zone to form a subcrop line. This subcrop line was transferred onto the resource maps that were used in calculating the tonnage of in-place coal resources. Of particular note is that for each coal bench or seam, two weathering lines were generated, one representing the intersection of the weathered surface with the top of the seam and the other the seam base. The importance of the two lines is the fact that with coals of this thickness, there are many instances when only top portions of the seam may be weathered while the lower portions are not.

In addition, after delineating the subcrop limits by the method described above, Norwest overlaid the prior representation of a burn line which was provided by GNP. It is apparent that this burn line was generated by sketching a representation of the burn area through drill holes which encountered coal burn and those that encountered un-weathered coal. It is expected that this "burn line" was determined through inspection of aerial photographs, though this has not been verified by Norwest.

Norwest compared the "zones of weathering" with the GNP "burn line". In general, the areas and lines compared well. It should be clearly noted that across the property the depth of weathering and areas of "burned" coal has been delineated to highly varying degrees of accuracy, based on the variable drill hole density. In-place resource estimations and in-place stripping ratios are very sensitive and dependent upon the degree of confidence of this weathering or burn zone. Prior to actual development of these properties, substantial amounts of additional drilling is warranted to verify the actual weathering limits.

RESOURCE ESTIMATION

The quantity of drilling that has been completed on the Otter Creek Property is sufficient to reasonably estimate overall coal tonnages in most areas within the property. Several areas, particularly in the north, warrant additional drilling. Norwest's estimates of resources are presented in two categories of tonnage within the property boundaries. These categories are referred to as *in-place resources* and *speculative resources.* Map A2.12 presents the in-place resources and associated coal quality by section. Also illustrated on this drawing are the subcrop line of the base of the Knoblock coal and the GNP burn line.

In-place resources as defined by Norwest include all resources that are delimited by the burn line and exist within a high degree of confidence resulting from a certain drill hole density, while the speculative resources are those that are projected between the GNP burn line and the projected subcrop line of the Lower Knoblock Seam. These speculative resources would consist of areas that may contain partially burned or oxidized coal. The areas containing these speculative resources are illustrated by shading on Maps A2.12 and A2.13. Norwest believes that it is very likely that substantial resources of this type exist but will require additional drilling to verify tonnage and specific locations.

Coal resources were calculated by measuring the volume of coal represented by the coal seam thickness intervals shown on the coal seam Isopach maps, limited by the subcrop lines formed by the intersection of the coal seam and the zone of weathering. The volume of coal was then converted to tons of coal by multiplying the volume by the factor of 77.6 pounds of coal per cubic foot. Table 2.1, Otter Creek Property, Coal Resource Summary found below, summarizes the coal resources classified by ownership. It provides the defined tons which are limited by the weathering zone on Map 2.3. Table 2.1 also lists speculative resources that represent resources that may be oxidized or partially burned. Again, additional outcrop drilling is needed to define this category of resources.

Table 2.1 represents the summary of an in-depth analysis of the coal resources present within the Otter Creek Property. Several detailed tables were generated in the analysis process, copies of which can be found in Appendix B. Included within these tables are detailed classifications of resources according to the USGS Circular 891, illustrating the Measured, Indicated and Inferred categories of reliability. Map A2.14 illustrates the data distribution and the resource classification areas.

Coal resources were calculated for the three prime mining tracts; Otter Creek Tract 1, Otter Creek Tract 2 and Otter Creek Tract3. Table 2.2, Otter Creek Property - Resource Summary of Tracts 1, 2, and 3 summaries the coal resources by tract and by landowner within each tract. With the exception of one small 162 acre tract, all the coal is controlled by GNP or the State of Montana. Figure 2.4, Coal Ownership Map, Otter Creek Tracts 1,2, and 3 show the location of these the prime development tracts.

Otter Creek Property Resource Summary
Table 2.1, Total, Inplace and Speculative Resources

Ownereship	Total Resources				In-place Resources			Speculative Resources		
	Acres	Waste (bcy)	Coal Tons	In-Place Ratio (CY/ton)	Acres	Waste (bcy)	Coal Tons	Acres	Waste (bcy)	Coal Tons
Total	62,034	16,201,971,882	4,324,951,299	3.7	51,305	14,326,037,698	3,767,763,101	10,729	1,875,934,183	557,188,198
Sate of Montana	12,551	3,669,435,534	1,056,225,648	3.5	10,742	3,357,323,849	948,900,268	1,809	312,111,685	107,325,380
Great Norhtern Properties	30,565	8,131,739,475	2,210,372,841	3.7	25,207	7,201,172,150	1,944,144,965	5,358	930,567,325	266,227,876
Other (Federal, Private, etc.)	18,918	4,400,796,872	1,058,352,810	4.2	15,356	3,767,541,699	874,717,868	3,562	633,255,173	183,634,942

TRACT 1

Location		Coal Ownership Summary					Total Resources										Speculative Resources			In-place Resources		
T/R	SECTION	Coal Ownership	Acres	GNP	State of Montana	Private	Waste (bcy)	Coal Tons	In-Place Ratio (CY/ton)	Moisture (%) EQ Basis	Moisture (%) AR Basis	Dry Basis (%) Ash (%)	Dry Basis (%) Sulfur (%)	Dry Basis (%) BTU/lb	MAF Basis BTU/lb	% in Ash Sodium	Acres	Waste (bcy)	Coal Tons	Acres	Waste (bcy)	Coal Tons
R45T3	25	GNP	628	628	0	0	152,485,520	63,218,760	2.4	25.15	28.95	7.15	0.27	11,908	12,828	4.40	0	-	-	628	152,485,520	63,218,760
R45T3	26	MONTANA	627	0	627	0	107,923,001	36,905,509	2.9	24.53	28.44	6.65	0.26	12,035	12,892	4.78	276	41,809,117	17,805,734	350	66,113,884	19,099,775
R45T3	27	GNP	643	643	0	0	39,655,338	8,238,315	4.8	24.37	28.32	6.82	0.26	11,959	12,832	6.55	231	39,655,338	8,238,315	0	0	0
R45T3	34	MONTANA	630	0	630	0	137,066,620	47,390,265	2.9	24.36	28.49	6.92	0.26	11,893	12,774	7.26	307	57,814,585	19,166,099	323	79,252,036	28,224,167
R45T3	35	GNP	627	627	0	0	213,788,926	65,933,488	3.2	24.04	28.37	6.88	0.26	11,939	12,820	7.13	0	-	-	627	213,788,926	65,933,488
R45T3	36	MONTANA	631	0	631	0	248,730,338	67,792,375	3.7	24.32	28.79	6.78	0.26	11,985	12,856	7.63	0	-	-	631	248,730,338	67,792,375
R45T4	1	GNP	617	617	0	0	177,664,645	62,677,035	2.8	23.97	28.68	6.91	0.26	11,921	12,805	7.52	0	-	-	617	177,664,645	62,677,035
R45T4	2	MONTANA	583	0	583	0	117,723,552	39,887,148	3.0	24.03	28.20	6.78	0.25	11,924	12,791	7.75	131	25,660,362	5,400,582	452	92,063,189	34,486,566
R45T4	3	GNP	613	613	0	0	109,097,045	43,214,341	2.5	24.46	28.52	6.95	0.26	11,889	12,776	8.05	203	29,230,659	12,347,727	409	79,866,386	30,866,614
GRAND TOTAL			**5,599**	**3,128**	**2,471**	**0**	**1,304,134,985**	**435,257,236**	**3.0**	**24.36**	**28.58**	**6.89**	**0.26**	**11,936**	**12,819**	**6.82**	**1,148**	**194,170,061**	**62,958,457**	**4,037**	**1,109,964,924**	**372,298,780**
TOTAL GNP			**3,128**				**692,691,474**	**243,281,939**	**2.8**	**24.40**	**28.63**	**6.97**	**0.26**	**11,918**	**12,811**	**6.66**	**434**	**68,885,997**	**20,586,042**	**2,281**	**623,805,477**	**222,695,897**
TOTAL STATE OF MONTANA			**2,471**				**611,443,511**	**191,975,297**	**3.2**	**24.31**	**28.53**	**6.79**	**0.26**	**11,959**	**12,829**	**7.02**	**714**	**125,284,064**	**42,372,415**	**1,756**	**486,159,447**	**149,602,883**

TRACT 2

Location		Coal Ownership Summary					Total Resources										Speculative Resources			In-place Resources		
T/R	SECTION	Coal Ownership	Acres	GNP	State of Montana	Private	Waste (bcy)	Coal Tons	In-Place Ratio (CY/ton)	Moisture (%) EQ Basis	Moisture (%) AR Basis	Dry Basis (%) Ash (%)	Dry Basis (%) Sulfur (%)	Dry Basis (%) BTU/lb	MAF Basis BTU/lb	% in Ash Sodium	Acres	Waste (bcy)	Coal Tons	Acres	Waste (bcy)	Coal Tons
R45T4	10	State of Montana	412	0	412	0	88,188,746	23,300,634	3.8	24.04	28.29	7.06	0.30	11,788	12,680	7.49	338	69,753,298	19,379,649	74	18,435,448	3,920,985
R45T4	11	GNP	674	674	0	0	174,429,347	69,009,462	2.5	24.01	28.27	6.89	0.27	11,950	12,830	7.69	72	14,562,126	3,002,514	601	159,867,221	66,006,948
R45T4	12	State of Montana	668	0	668	0	156,970,046	73,256,900	2.1	24.55	28.47	6.78	0.26	12,020	12,892	8.20	0	-	-	668	156,970,046	73,256,900
R45T4	13	GNP	465	465	0	0	211,586,426	55,500,331	3.8	24.25	28.31	6.70	0.26	12,027	12,888	8.00	0	-	-	465	211,586,426	55,500,331
R45T4	14	State of Montana	469	0	469	0	154,326,247	57,340,481	2.7	24.06	28.23	6.56	0.27	12,071	12,916	8.36	0	-	-	469	154,326,247	57,340,481
R45T4	15	GNP	360	360	0	0	55,129,096	33,099,286	1.7	24.07	28.14	6.79	0.29	12,004	12,868	7.97	43	7,360,388	3,770,267	317	47,768,708	29,329,019
R45T4	22	GNP	120	120	0	0	12,145,372	13,536,558	0.9	24.13	27.67	7.83	0.32	11,871	12,828	7.10	0	-	-	120	12,145,372	13,536,558
R45T4	22	State of Montana	201	0	201	0	29,381,763	23,185,241	1.3	24.12	27.69	7.62	0.32	11,904	12,845	7.13	0	-	-	0	29,381,763	23,185,241
R45T4	22	OTHER	162	0	0	162	18,551,890	16,165,693	1.1	24.14	27.54	7.85	0.32	11,872	12,840	6.38	0	-	-	0	18,551,890	16,165,693
R45T4	23	GNP	674	674	0	0	210,664,617	80,099,553	2.6	24.14	28.02	7.18	0.30	11,978	12,884	7.05	0	-	-	674	210,664,617	80,099,553
R45T4	24	State of Montana	598	0	598	0	327,847,427	67,269,794	4.9	24.18	28.36	7.13	0.28	11,974	12,880	7.18	0	-	-	598	327,847,427	67,269,794
R45T4	25	GNP	715	715	0	0	288,764,953	70,723,718	4.1	24.16	28.53	7.73	0.30	11,900	12,866	6.40	0	-	-	715	288,764,953	70,723,718
R45T4	26	State of Montana	825	0	825	0	193,349,695	71,587,040	2.7	24.15	28.06	8.15	0.32	11,860	12,871	5.29	32	4,137,050	1,168,718	793	189,212,645	70,418,322
R45T4	35	GNP	167	167	0	0	26,768,046	9,002,314	3.0	24.16	28.39	8.26	0.31	11,829	12,841	6.05	48	5,554,849	1,453,307	119	21,213,198	7,549,007
R45T4	36	State of Montana	189	0	189	0	73,707,642	12,980,027	5.7	24.16	29.65	7.31	0.30	11,923	12,841	6.97	0	-	-	189	73,707,642	12,980,027
GRAND TOTAL			**6,699**	**3,175**	**3,363**	**162**	**2,021,811,314**	**676,057,031**	**3.0**	**24.17**	**28.25**	**7.21**	**0.29**	**11,955**	**12,866**	**7.22**	**534**	**101,367,711**	**28,774,455**	**6,165**	**1,920,443,603**	**647,282,576**
TOTAL GNP			**3,174**				**979,487,858**	**330,971,221**	**3.0**	**24.13**	**21.46**	**5.44**	**0.21**	**9,059**	**9,746**	**5.57**	**164**	**27,477,363**	**8,226,088**	**3,011**	**952,010,495**	**322,745,133**
TOTAL STATE OF MONTANA			**3,363**				**1,023,771,566**	**328,920,116**	**3.1**	**24.22**	**28.30**	**7.21**	**0.29**	**11,956**	**12,869**	**7.21**	**371**	**73,890,349**	**20,548,367**	**2,992**	**949,881,218**	**308,371,750**
TOTAL PRIVATE			**162**				**18,551,890**	**16,165,693**	**1.1**	**24.14**	**27.54**	**7.85**	**0.32**	**11,872**	**12,840**	**6.38**	**0**	**0**	**0**	**162**	**18,551,890**	**16,165,693**

TRACT 3

Location		Coal Ownership Summary					Total Resources										Speculative Resources			In-place Resources		
T/R	SECTION	Coal Ownership	Acres	GNP	State of Montana	Private	Waste (bcy)	Coal Tons	In-Place Ratio (CY/ton)	Moisture (%) EQ Basis	Moisture (%) AR Basis	Dry Basis (%) Ash (%)	Dry Basis (%) Sulfur (%)	Dry Basis (%) BTU/lb	MAF Basis BTU/lb	% in Ash Sodium	Acres	Waste (bcy)	Coal Tons	Acres	Waste (bcy)	Coal Tons
R45T4	5	GNP	660	660	0	0	133,655,165	49,181,085	2.7	24.36	26.83	6.87	0.29	11,999	12,882	7.65	249	43,156,272	16,584,926	411	90,498,892	32,596,160
R45T4	6	State of Montana	626	0	626	0	226,001,070	63,852,089	3.5	24.32	26.69	6.77	0.27	12,051	12,925	9.06	41	7,695,128	3,825,538	585	218,305,942	60,026,551
R45T4	7	GNP	513	513	0	0	197,688,176	57,411,209	3.4	24.27	26.56	6.77	0.26	11,973	12,840	9.24	0	-	-	513	197,688,176	57,411,209
R45T4	8	State of Montana	602	0	602	0	155,971,292	63,376,970	2.5	24.30	27.02	6.73	0.27	12,046	12,913	8.58	10	2,366,187	236,047	593	153,605,105	63,140,923
R45T4	9	GNP	395	395	0	0	59,270,691	28,997,476	2.0	24.31	27.59	6.51	0.25	12,015	12,850	8.23	91	10,506,574	6,151,225	304	48,764,117	22,846,251
R45T4	10	GNP	39	39	0	0	5,165,082	1,701,942	3.0	24.17	27.92	6.80	0.29	11,975	12,843	7.02	37	4,965,052	1,564,575	2	200,030	137,368
R45T4	15	GNP	120	120	0	0	14,146,515	11,396,031	1.2	24.15	28.07	6.86	0.29	12,006	12,877	7.37	0	-	-	120	14,146,515	11,396,031
R45T4	16	State of Montana	476	0	476	0	69,441,137	47,871,805	1.5	24.21	27.82	6.60	0.27	12,066	12,912	8.19	0	-	-	476	69,441,137	47,871,805
R45T4	17	GNP	424	424	0	0	123,029,818	47,955,169	2.6	24.26	27.42	6.83	0.26	11,954	12,814	8.82	0	-	-	424	123,029,818	47,955,169
R45T4	18	State of Montana	640	0	640	0	354,435,493	71,311,568	5.0	24.25	26.93	6.88	0.26	11,971	12,849	9.01	0	-	-	640	354,435,493	71,311,568
R45T4	20	State of Montana	586	0	586	0	206,997,619	61,448,520	3.4	24.21	27.27	7.47	0.30	11,950	12,898	7.00	0	-	-	586	206,997,619	61,448,520
R45T4	21	GNP	640	640	0	0	163,781,896	72,055,955	2.3	24.18	27.15	8.19	0.33	11,817	12,814	6.82	0	-	-	640	163,781,896	72,055,955
R45T4	22	State of Montana	161	0	161	0	26,009,924	18,345,018		24.15	27.35	8.22	0.34	11,811	12,799	7.11	0	-	-	161	26,009,924	18,345,018
GRAND TOTAL			**5,883**	**2,791**	**3,092**	**0**	**1,735,593,878**	**594,904,838**	**2.9**	**24.26**	**27.11**	**7.06**	**0.28**	**11,973**	**12,868**	**8.19**	**429**	**68,689,212**	**28,362,311**	**5,454**	**1,666,904,666**	**566,542,527**
TOTAL GNP			**2,791**	**2,791**	**0**	**0**	**696,737,343**	**268,698,867**	**2.6**	**24.26**	**27.10**	**7.16**	**0.28**	**11,938**	**12,839**	**8.02**	**378**	**58,627,898**	**24,300,726**	**2,414**	**638,109,445**	**244,398,142**
TOTAL STATE OF MONTANA			**3,092**	**0**	**3,092**	**0**	**1,038,856,536**	**326,205,970**	**3.2**	**24.25**	**27.12**	**6.97**	**0.27**	**12,002**	**12,892**	**8.33**	**51**	**10,061,314**	**4,061,585**	**3,041**	**1,028,795,221**	**322,144,385**

GRAND TOTALS FOR TRACT 1, TRACT 2 AND TRACT 3

GRAND TOTAL	**18,181**	**9,094**	**8,926**	**162**	**5,061,540,177**	**1,706,219,104**	**3.0**	**24.25**	**27.94**	**7.07**	**0.28**	**11,957**	**12,855**	**7.46**	**2,111**	**364,226,985**	**120,095,222**	**16,070**	**4,697,313,193**	**1,586,123,882**
TOTAL GNP	**9,094**				**2,368,916,675**	**842,952,028**	**2.8**	**24.25**	**25.33**	**6.43**	**0.25**	**10,802**	**11,617**	**6.67**	**976**	**154,991,258**	**53,112,856**	**8,118**	**2,213,925,417**	**789,839,172**
TOTAL STATE OF MONTANA	**8,925**				**2,674,071,613**	**847,101,383**	**3.2**	**24.25**	**27.90**	**7.02**	**0.28**	**11,974**	**12,869**	**7.60**	**1,135**	**209,235,727**	**66,982,367**	**7,790**	**2,464,835,886**	**780,119,017**
TOTAL PRIVATE	**162**				**18,551,890**	**16,165,693**	**1.1**	**24.14**	**27.54**	**7.85**	**0.32**	**11,872**	**12,840**	**6.38**	**0**	**0**	**0**	**162**	**18,551,890**	**16,165,693**

COAL QUALITY

The coal resources contained within the Otter Creek Property are sub-bituminous in rank. Quality data have been made available through the analysis of core samples from 115 drill holes completed on the Otter Creek Property in the various drilling programs since the early 1970's. These data have defined the quality of the coal present within the property. The quality database contains proximate analysis, ultimate analysis, mineral analysis of ash, and in some cases equilibrium moisture analysis and density.

Quality Modeling

In general, core samples of coal from a given drill hole were sampled and analyzed in zones ranging from less than one foot to as much as ten feet in thickness. In some cases, these samples were combined to produce a physical composite. Because not all holes had physical composite samples, calculated mathematical composites were used for each of the drill holes containing quality data. These calculated values were double-weighted for both interval thickness and density. Where physical density data were not available for a sample this value was calculated using a linear regression analysis of the ash/density relationship of all samples having both data sets. A comparison of several physical composites with calculated composites of the same interval was made which validated that the composite method was accurate. Numerous tables of coal quality data were generated in the process of reducing the quality data. These intermediate stage tables are presented as back-up material and can be found in Appendix C.

The Knoblock coal averages 8,500 to 8,600 BTU/lb on an as-received basis. The high moisture content, which averages 27.5% to 28.0%, is fairly typical of Powder River Basin coals. The sulfur content of the coal is very low and with few exceptions the coal is classified as compliance coal, producing less than 1.2 pounds of SO_2/million BTU. The ash content of the coal is also low. Table 2.3 Otter Creek Property Coal Quality Summary, lists the statistics for selected parameters by seam.

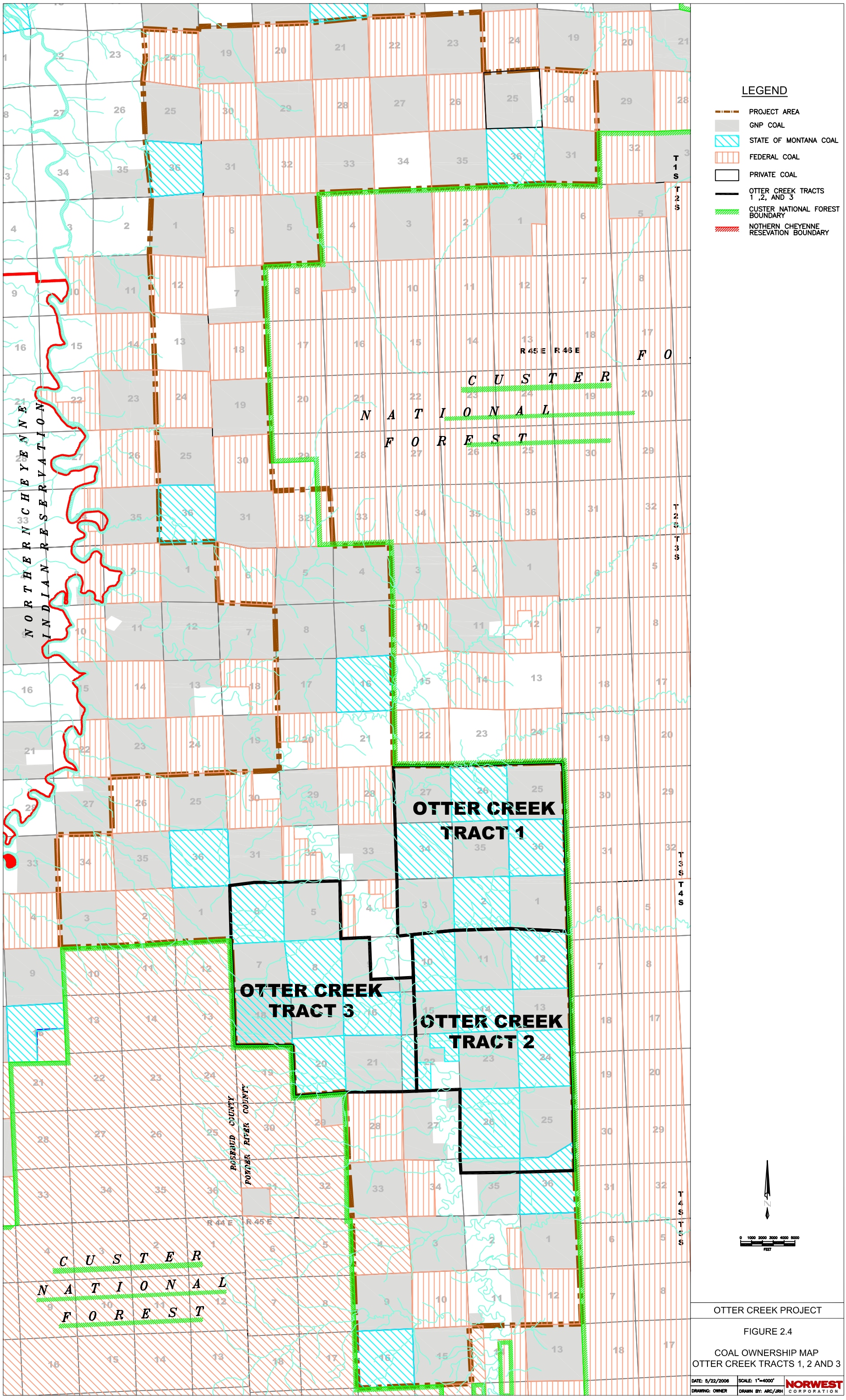

LEGEND
PROJECT AREA
GNP COAL
STATE OF MONTANA COAL
FEDERAL COAL
PRIVATE COAL
OTTER CREEK TRACTS 1 ,2, AND 3
CUSTER NATIONAL FOREST BOUNDARY
NOTHERN CHEYENNE RESEVATION BOUNDARY
NORTHERN CHEYENNE INDIAN RESERVATION
CUSTER NATIONAL FOREST
OTTER CREEK TRACT 1
OTTER CREEK TRACT 3
OTTER CREEK TRACT 2
ROSEBUD COUNTY
POWDER RIVER COUNTY
R 44 E
R 45 E
R 46 E
T 1 S
T 2 S
T 3 S
T 4 S
T 5 S
0 1000 2000 3000 4000 5000
FEET
OTTER CREEK PROJECT
FIGURE 2.4
COAL OWNERSHIP MAP
OTTER CREEK TRACTS 1, 2 AND 3
DATE: 5/22/2008
SCALE: 1"=4000'
DRAWING: OWNER
DRAWN BY: ARC/JRH
NORWEST CORPORATION

TABLE 2.3: OTTER CREEK PROPERTY COAL QUALITY SUMMARY

Upper Knoblock Seam											
		AS Received					Lb SO2/		Lb NaO/	Dry	MAF
	Thickness	Moisture	Ash	Density	BTU/Lb	Sulfur	mmBTU	NaO	mm BTU	BTU/Lb	BTU/Lb
Min	2.0	22.39	3.32	1.22	6,798	0.12	0.29	0.73	0.00	9,345	11,238
Max	51.5	31.21	21.01	1.41	9,310	1.58	26.59	10.46	3.21	12,327	13,154
Mean	35.4	27.28	5.50	1.24	8,651	0.27	1.04	6.61	0.37	11,906	12,847
St. Dev.	16.6	2.29	5.70	0.06	979	0.48	11.87	2.82	1.39	1,334	1,083
Knoblock Seam											
		AS Received					Lb SO2/		Lb NaO/	Dry	MAF
	Thickness	Moisture	Ash	Density	BTU/Lb	Sulfur	mmBTU	NaO	mm BTU	BTU/Lb	BTU/Lb
Min	3.6	24.21	3.48	1.22	5,806	0.09	0.20	0.02	0.00	8,896	10,235
Max	72.2	36.35	33.73	1.55	9,372	0.77	2.40	10.96	40.99	12,748	14,189
Mean	60.5	28.04	5.09	1.24	8,594	0.20	0.47	7.03	0.49	11,946	12,843
St. Dev.	11.4	2.99	7.10	0.08	883	0.24	0.71	2.56	11.11	1,174	765
Lower Knoblock Seam											
		AS Received					Lb SO2/		Lb NaO/	Dry	MAF
	Thickness	Moisture	Ash	Density	BTU/Lb	Sulfur	mmBTU	NaO	mm BTU	BTU/Lb	BTU/Lb
Min	10.2	25.46	4.05	1.23	5,233	0.16	0.37	3.57	0.26	7,152	8,423
Max	22.7	31.10	18.99	1.39	8,804	0.46	3.67	10.46	2.94	12,191	13,207
Mean	16.4	27.68	6.97	1.26	8,325	0.27	0.80	6.01	0.56	11,534	12,702
St. Dev.	3.8	1.96	6.39	0.07	881	0.09	1.22	2.36	0.85	1,244	715

As shown on Table 2.3, the sodium content of the ash is considered high and averages between 6.0 and 7.0 percent. An inverse relationship exists in Powder River Basin coals where the sodium content of the coal ash generally increases as the ash content decreases. This relationship is strongly evident in the data regarding this coal. The higher sodium values are not surprising because of the low average ash content of the coals.

The calculated composite quality data were used to generate a quality model of the coal resources found within the property. This is important to identify the lateral variability in quality over the property and to visualize the spacing of data. Maps A2.15 and A2.16 illustrate the distribution of the in-place moisture of the Knoblock coal benches on an as-received quality basis. The moisture content of the coal shows little variability in all of the seams.

One noteworthy point is the lack of quality data in the northern portion of the property. The area north of the north half of Township 2 South, the area where the Knoblock seam splits into the Upper and Lower Knoblock seams, has no quality data. Core drill holes will need to be completed to characterize the quality of the coal in this area.

The ash content of the coal on a dry basis has been modeled and is shown on Maps A2.17 and A2.18. As can be seen on Map A2.17, the ash content of the Knoblock and Upper Knoblock seams is uniformly low but Map A2.18 shows a high ash zone (26.5%) in the Lower Knoblock seam. This zone is a one-drill hole anomaly and may be an isolated zone that is likely to be not representative of the ash content throughout the area.

The sulfur content of the coal is shown on Maps A2.19 and A2.20. Both these maps illustrate the consistently low nature of the sulfur content within the property.

The calorific value of the coal on a dry basis has been modeled and is illustrated on Maps A2.21 and A2.22. The MAF BTU value has also been modeled and is illustrated on Maps A2.23 and A2.24. These maps demonstrate the consistent nature of the coal regarding its heat value content. The only exception to this is a one drill hole anomaly in both the MAF and Dry BTU of the Lower Knoblock seam in the same area that showed elevated ash content. Because the MAF BTU is lower than adjacent holes the coal in this drill hole may be oxidized.

The sodium content in the coal ash has been modeled and is illustrated on Map A2.25 Knoblock/Upper Knoblock Sodium and Map A2.26 Lower Knoblock Sodium. Both of these maps show greater lateral variability than is shown on any of the other parameters modeled. A comparison of the maps regarding dry ash content, Maps A2.17 and A2.18 with the sodium content, Maps A2.25 and A2.26 show the areas having low ash coincide with the areas having the highest sodium content. The area of high ash illustrated on Map A2.18 is shown to have much lower sodium content (2.0%) than any holes surrounding it. It is evident from these data that when this coal property is mined, care in blending will be required to minimize the variability in the sodium content of the coal that would be produced. In addition, it is evident that additional drilling data will be required to implement coal quality programs.

Limited data were available regarding the equilibrium moisture of the coal. These data were used to model the variability in the equilibrium moisture and are illustrated on Map 2.27. Most of the equilibrium moisture data are from drill holes in the southern portion of the property but north of the zone where the Knoblock and Lower Knoblock split apart. The equilibrium moisture shows little variability but more data should be collected regarding this, particularly in the northern portion of the property.

Vertical Variability

The coal quality data was analyzed to identify vertical variability within each major bench of the Knoblock seam. This was done in two ways. First, a statistical approach was taken to assess variability in a general sense. Secondly, quality plots were generated for each hole in order to visually review the distribution of quality parameters from each individual drill hole.

For the statistical approach the coal quality data from each hole and seam were classified as to the relative position in each coal bench; the roof coal (the upper most sample in the drill hole), the upper half of the seam below the roof coal (the samples below the roof coal sample through the middle sample within the seam), the lower half of the seam above the floor coal (samples extending below the mid point of the seam down to but not including the bottom sample in the seam), and the floor coal (the lowest sample within the seam). These samples were then statistically analyzed. A summary of this investigation is presented in Table 2.4 Otter Creek Property - Coal Quality Vertical Comparison.

TABLE 2.4: OTTER CREEK PROPERTY - COAL QUALITY VERTICAL COMPARISON

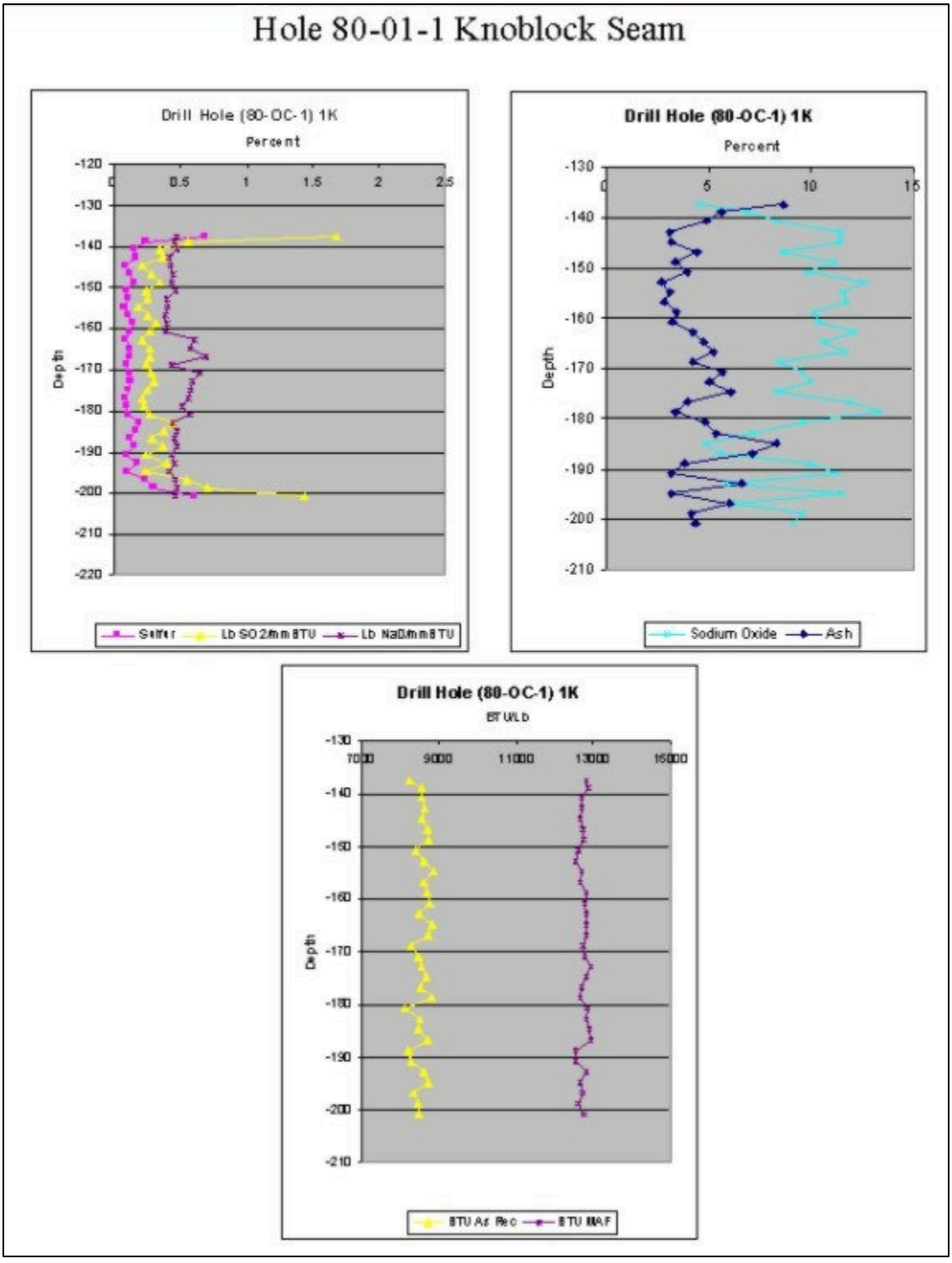
		AS Received					Lb SO_2/		Lb NaO/	Dry	MAF
	Thickness	Moisture	Ash	Density	BTU/Lb	Sulfur	mmBTU	NaO	mm BTU	BTU/Lb	BTU/Lb
Upper Knoblock Seam Quality Data											
Roof Coal	2.30	26.48	8.83	1.28	8,282	0.89	8.49	4.65	1.06	11,310	12,489
Upper 1/2 Below	18.91	27.49	4.64	1.23	8,736	0.22	0.51	6.74	0.31	12,051	12,869
Lower 1/2 Above	16.86	27.08	6.04	1.25	8,611	0.25	0.62	6.71	0.34	11,821	12,872
Floor Coal	1.79	27.97	4.96	1.24	8,615	0.25	0.58	6.90	0.33	11,966	12,841
Knoblock Seam Quality Data											
Roof Coal	2.43	26.75	9.50	1.29	8,211	0.47	1.22	5.54	2.87	11,242	12,785
Upper 1/2 Below	29.70	28.19	4.42	1.23	8,642	0.15	0.36	7.56	0.37	12,032	12,822
Lower 1/2 Above	25.14	27.97	5.27	1.24	8,597	0.19	0.44	6.60	0.38	11,938	12,871
Floor Coal	1.99	28.35	7.16	1.26	8,338	0.54	1.34	6.47	0.78	11,664	12,885
Lower Knoblock Seam Quality Data											
Roof Coal	1.97	25.74	9.80	1.29	8,315	0.35	0.86	4.32	0.47	11,217	12,899
Upper 1/2 Below	8.59	27.95	6.17	1.25	8,270	0.19	0.55	5.79	0.52	11,497	12,566
Lower 1/2 Above	4.86	27.80	7.61	1.27	8,335	0.29	1.05	6.91	0.70	11,576	12,756
Floor Coal	1.40	28.41	5.47	1.24	8,642	0.61	1.40	6.71	0.41	12,077	13,070

This comparison indicates the following:

- An increase in ash content in the roof and floor samples of all seams.
- The lower half of the Knoblock seam has a tendency to have higher ash content than the upper half.
- The Lower Knoblock is also higher in ash than the upper half of the Knoblock seam. This is not surprising because that portion of higher ash Knoblock is correlative to the Lower Knoblock seam.
- Correspondingly, the sodium oxide content is generally lower in the top portions of the benches and increases downward
- The lower ash portions of the seams generally contain the highest sodium oxide levels.
- The roof coal, due to its reduced calorific values, demonstrates elevated LB SO_2/mmBTU values.

The second way in which the quality data was reviewed vertically was to plot graphs of selected quality parameters with depth. Up to three graphs were generated for each drill hole containing quality data and have been plotted for a comparison of the vertical quality variation within each drill hole. Figure 2.5, Example Graphs of Coal Quality by Drill hole, illustrates how this quality data has been prepared. Similar graphs for all holes containing quality data are found in Appendix D. These graphs illustrate the tendency for the coal seams to have higher ash content in their roof and floor and as a result they also tend to have lower BTU value in these zones. The inverse relationship between the ash content and the sodium content in the ash is also very evident in most of these graphs.

Figure 2.5 Example Coal Quality Vertical Distribution



Summary Conclusions and Opportunities Related to Blending
The primary conclusions derived from the lateral coal quality modeling and the review of the vertical variability of coal quality parameters are as follows:

- The coal averages 8,500 to 8,600 BTU/lb of coal on an as-received basis.
- Moisture content which averages 27.5% to 28.0% is fairly typical of Powder River Basin coals.
- The sodium content of the ash is considered high and averages between 6.0 and 7.0 percent.
- An inverse relationship exists where the sodium content of the coal ash generally increases as the ash content decreases.
- The sulfur content of the coal generally is consistently low, averaging approximately 0.27 % and with few exceptions, the coal is classified as compliance coal which produces less than 1.2 pounds of SO_2/million BTU.
- Sulfur content however, is elevated in the top portion of the Upper Knoblock seam.
- Ash content is the highest in the top portions of all of the coal benches.
- The Upper Knoblock Seam is generally slightly lower in ash content and higher in Sodium Oxide than the lower portions of the Knoblock Seam.
- Coal quality control programs and blending will need to be implemented during mining operations in order to maintain consistent product qualities.
- The opportunities for blending will need to be assessed on specific mining block areas as opposed to generalities applied to the entire Otter Creek project area.

MINING EVALUATION

Based on advice from GNP and the State of Montana, Norwest's focused our evaluation on the southern portion of the property because it is the most attractive for development from both resource and land control perspective. In this southern area, GNP and the State of Montana control the majority of the coal resources. In addition, the exploration drill hole density provides sufficient data to do a good evaluation of this property.

Norwest mining engineers evaluated the mineability of the Otter Creek coal resources by considering the topography, surface features, overburden depths, the thickness and dip of coal seams, the strip ratios, and coal outcrop lines. The geological investigation produced a series of maps showing these features and can be found in Appendix A to this report.

LOGICAL MINING UNITS

Norwest divided the southern portion of the Otter Creek reserve into a total of six LMUs. An LMU is an area of land in which the coal resources can be developed in an efficient, economical, and orderly manner as a unit with due regard to conservation of coal reserves and other resources. An LMU may consist of Federal leaseholds, private land, state lands combined under the effective control of a single operator that can be developed and operated as a single operation.

For the this study, each LMU has the following properties;

- Minimum of 200 million tons (Mt) of coal
- Maximum in-situ stripping ratio of 5:1 (five cubic yards of waste per ton of coal)
- Can be developed and operated as a single operation
- Can be separated from adjacent LMUs by physical boundaries such as stream channels, ridge lines or other naturally occurring barriers
- Sufficient resources for a minimum of a 40 year life.

In reality, all identified LMUs have more than 200 million tons of coal in-place, so that high-production, long-term mine plans could be developed. Reserves of this size are more likely to be attractive to major coal producers and energy project sponsors interested in

developing these resources. Table 3.1, LMU Reserves lists six LMUs with their related resource information. The LMUs are shown on Figure 3.1, LMU Map[2].

LMU 1 – Area A1
This LMU is located in Township 3S, Range 45 E, Sections 25, 26, 33, 34, 35 and 26 and Township 4S, Range 45 E, Sections 1, 2, and 3 and comprises the A1 mining area. It covers approximately 3,500 acres. At a maximum in-place strip ratio of 5:1, this LMU contains 355 million tons in two main seams. The average effective strip ratio, assuming 95% recovery, is 3.0:1 in place. Heat content averages 12,820 Btu (air dried basis), while sodium in ash averages 6.9 %.

There is a possible alluvial valley floor (AVF) lying on the south side of this LMU that contains 9 million tons of coal. This is shown separately to recognize that mining could possibly be restricted from this area, should it be classified as an AVF by the State.

Mining operations would primarily follow the strike of the coal outcrop, i.e., in a north-south and a northeast-southwest direction and advance easterly from the outcrop to the lease boundary. In the northern most portion of this LMU (Area A1), mining cuts are oriented north-south and northeast-south to take advantage of coal outcrop.

LMU 2 – Area A2 – A3
This LMU borders on the south of LMU 1 and lies primarily within Township 4S, R45E Sections 1, 2 10, 11, 12, 13, 14, 15, 22, 23, 24, 25 ,26, 35 and 36. It covers 5,000 acres and contains 510 million tons of coal at an average effective strip ratio of 2.8:1. Average heating content is 11,956 Btu (air dried basis), and sodium in ash averages 7.2%.

[2] Please note that only LMUs 1 through 4 are actually indicated on Figure 3.1. LMU 5 is a combination of LMUs 1 and 2 while LMU 6 is a combination of LMUs 3 and 4.

Table 3.1 Great Northern Properties LMU Reserves

		Coal			IN-SITU COAL QUALITY									Annual
							DRY			Moisture - Ash	Sodium	Stripping Ratio		Production
Mine Block	Waste Volumes (bcy)	Volumes (bcy)	In-Situ Tons (tons)	Recoverable Tons (tons)	Equilibrated Moisture (%)	As Received Moisture (%)	Ash (%)	Sulfur (%)	Btu (btu/lb)	Free Btu (btu/lb)	in the Ash (%)	Virgin (bcy : ton)	Effective (bcy : ton)	40 Year Mine Life
LMU 1 AREA A1														
AREA A1 MAIN PIT	1,018,013,620	338,808,767	354,936,064	337,189,261	24.35	28.61	6.89	0.26	11,936	12,819	6.91	**2.87**	**3.02**	**8.4**
AREA_A1_1_AVF	8,896,612	8,527,977	8,933,909	8,487,213	24.51	28.53	6.93	0.26	11,956	12,844	7.21	**1.00**	**1.05**	**0.2**
TOTAL AREA A1	**1,026,910,233**	**347,336,744**	**363,869,973**	**345,676,475**	**24.36**	**28.61**	**6.89**	**0.26**	**11,936**	**12,820**	**6.92**	**2.82**	**2.97**	**8.6**
LMU 2 AREA A2 AND A3														
AREA A2 and AREA A3	1,479,564,664	509,314,665	533,558,043	506,880,141	24.18	28.26	7.18	0.28	11,966	12,876	7.26	**2.77**	**2.92**	**12.7**
AREA A2 AVF	46,593,276	40,029,643	41,935,054	39,838,302	24.21	27.84	7.45	0.30	11,917	12,847	6.87	**1.11**	**1.17**	**1.0**
AREA A3 AVF	13,702,141	8,936,843	9,362,236	8,894,125	23.52	26.91	7.49	0.31	11,575	12,511	4.90	**1.46**	**1.54**	**0.2**
TOTAL AREA A2 AND A3 COMBINED	**1,539,860,082**	**558,281,151**	**584,855,334**	**555,612,567**	**24.17**	**28.21**	**7.21**	**0.29**	**11,956**	**12,868**	**7.19**	**2.63**	**2.77**	**13.9**
LMU 3 AREA B1														
AREA B1	**777,596,175**	**242,065,305**	**253,587,614**	**240,908,233**	**24.30**	**26.84**	**6.77**	**0.27**	**12,012**	**12,881**	**8.74**	**3.07**	**3.23**	**6.0**
LMU 4 AREA B2														
AREA B2	596,618,818	239,853,272	251,270,288	238,706,773	24.21	27.40	7.38	0.29	11,932	12,854	7.68	**2.37**	**2.50**	**6.0**
AREA B2 AVF	32,373,233	27,620,278	28,935,004	27,488,254	24.15	27.63	7.63	0.32	11,895	12,836	6.82	**1.12**	**1.18**	**0.7**
TOTAL AREA B2	**628,992,051**	**267,473,550**	**280,205,291**	**266,195,027**	**24.20**	**27.42**	**7.40**	**0.30**	**11,928**	**12,853**	**7.59**	**2.24**		**6.7**
LMU 5 AREA A1, A2 AND A3														
AREA A1 and AREA A2	2,497,578,285	848,123,432	888,494,108	844,069,402	24.25	28.40	7.07	0.28	11,954	12,853	7.12	**2.81**	**2.96**	**21.1**
AREA A3 AVF	13,702,141	8,936,843	9,362,236	8,894,125	23.52	26.91	7.49	0.31	11,575	12,511	4.90	**1.46**	**1.54**	**0.2**
AREA A2 AVF	46,593,276	40,029,643	41,935,054	39,838,302	24.21	27.84	7.45	0.30	11,917	12,847	6.87	**1.11**	**1.17**	**1.0**
AREA A1 AVF	8,896,612	8,527,977	8,933,909	8,487,213	24.51	28.53	6.93	0.26	11,956	12,844	7.21	**1.00**	**1.05**	**0.2**
TOTAL AREA A1 AND A2 COMBINED	**2,566,770,315**	**905,617,895**	**948,725,307**	**901,289,042**	**24.24**	**28.36**	**7.09**	**0.28**	**11,949**	**12,849**	**7.09**	**2.71**	**2.85**	**22.5**
LMU 6AREA B1 AND B2														
AREA B1 AND B2	1,374,214,993	481,918,577	504,857,901	479,615,006	24.25	27.12	7.07	0.28	11,972	12,868	8.21	2.72	2.87	12.0
AREA B2 AVF	32,373,233	27,620,278	28,935,004	27,488,254	24.15	27.63	7.63	0.32	11,895	12,836	6.82	1.12	1.18	0.7
TOTAL AREA B1 AND B2 COMBINED	**1,406,588,226**	**509,538,856**	**533,792,905**	**507,103,260**	**24.24**	**27.17**	**7.13**	**0.28**	**11,964**	**12,865**	**8.07**	**2.64**	**2.77**	**12.7**

LMU 1 - AREA A1

LMU 3 - AREA B1

LMU 2 - AREA A2-A3

LMU 4 - AREA B2

T 1 S

T 2 S

T 3 S

T 4 S

T 5 S

LEGEND

TOPO

LMU BOUNDARY

TRACT BOUNDARY

N

0 1000 2000 3000 4000 5000

FEET

GREAT NORTHERN PROPERTIES

EXHIBIT 3.1

OTTER CREEK PROJECT

LOGICAL MINING UNIT MAP

DATE: 11/14/2005	SCALE: 1"=4000'
DRAWING: LMU	DRAWN BY: JRH

NORWEST CORPORATION

There are two possible AVFs[3], one lying on the north side and one lying on the west side of this LMU. These potential AVFs contain 40 million tons and 9 million tons of coal, respectively.

Mining operations are primarily oriented north-south and east-west in this LMU.

LMU 3 – Area B1
This LMU is located west of LMUs 1 and 2 and lies within Township 3S, R45E Sections 5, 6, 7, 8, 9, 17 and 18. It covers 2,400 acres and contains 254 million tons of coal at an average effective strip ratio of 3.2:1. Average heating content is 12,012 Btu (air dried basis), and sodium in ash averages 8.7%.

There are no likely AVFs found adjacent to this block.

Mining operations are primarily oriented northwest-southeast along the strike of the coal in this LMU.

LMU 4 – Area B2
This LMU borders on the south of LMU 3 and lies primarily within Township 3S, R45E Sections 15, 16, 17, 18, 20, 21, and 22. It covers 2,300 acres and contains 251 million tons of coal at an average effective strip ratio of 2.4:1. Average heating content is 11,932Btu (air dried basis), and sodium in ash averages 7.7%.

There is one potential AVF lying on the east side of this LMU; this is estimated to contain 29 million tons of coal.

Mining operations are primarily oriented northwest-southeast along the strike of the coal in this LMU.

LMU 5 – Area A1 and A2 Combined
This LMU combines the resources of Area A1 and A2 and is located in Township 4S, R45W and Township 3S, R45E. It covers a total 7,000 acres and contains 751 million tons of coal at an average effective strip ratio of 2.8:1. Average heating content is 11,969Btu (air dried basis), and sodium in ash averages 7.4%.

[3] All AVFs are shown separately to recognize that mining could possibly be restricted from this area, should it be classified as an AVF by the State.

There are three potential AVFs: one lying south of Area A1; one lying north of Area A2; and one lying west of Area A2. These potential AVFs contains a total of 51 million tons of coal.

LMU 6 – Area B1 and B2 Combined
This LMU combines the resources of Area B1 and B2 and is located in Township 3S, R45E. It covers a total 4,700 acres and contains 505 million tons of coal at an average effective strip ratio of 2.9:1. Average heating content is 11,972Btu (air dried basis), and sodium in ash averages 8.2%.

There is one possible AVF lying east of Area B2. This potential AVF contains a total of 29 million tons of coal.

COAL QUALITY

Figure A.2 is a cross-section depicting the coal seams in relation to the surface of the land. A summary of coal quality by seam and seam thickness for each LMU is found in Table 3.2, LMU Coal Quality by Seam. This table shows that the quality of the Upper and Lower Knoblock Seams are nearly identical with only minor variations in any of the parameters.

MINING APPROACH

All LMUs are amenable to surface mining using draglines and truck-shovel fleets for overburden removal. These techniques are used at other mines in the region including Absaloka, Decker, Rosebud, and Spring Creek Mines. Large walking draglines working with large (850 hp) push dozers usually remove up to 150 feet of the overburden above the upper coal seam. Overburden greater than 150 feet in thickness and thick interburden are moved using truck-shovel fleets. For thin interburden, large wheel loaders, large push dozers and wheel scrapers can be used effectively. Drilling and blasting is generally required to fragment the overburden and thick interburdens. This eases the digging of this material and increases the equipment productivity.

For each LMU, the dragline was sized according to the accepted mining industry rule of thumb i.e. by dividing the largest annual dragline removal requirements by a dragline productivity factor of 250,000 bank cubic yards (BCY) per cubic yard of dragline bucket capacity. For example: An LMU requiring a maximum annual dragline volume of 30 million BCY would require a dragline having a bucket capacity of 120 cubic yards (CY). Therefore, the smaller LMUs will require 70 to 80 CY draglines while the larger

Table 3.2 Great Northern Properties LMU Coal Quality by Seam

LMU - MINE BLOCK		Seam	Seam Thickness (feet)	IN-SITU COAL QUALITY				
				As Received	DRY			Sodium
				Moisture (%)	Ash (%)	Sulfur (%)	Btu (btu/lb)	in the Ash (%)
LMU - 1	AREA A1	UK2	42.08	28.60	6.90	0.26	11,934	6.94
		LK	18.11	28.63	6.88	0.26	11,940	6.83
LMU - 2	AREA A2 - A3	UK2	37.08	28.35	7.75	0.28	11,888	5.87
		UK1	4.80	28.39	8.51	0.28	11,795	6.44
		LK	15.06	28.10	8.59	0.39	11,837	5.69
LMU - 3	AREA B1	UK2	44.30	24.30	6.77	0.27	12,012	8.75
		LK	19.33	24.30	6.78	0.27	12,011	8.72
LMU - 4	AREA B2	UK2	46.87	27.38	6.82	0.28	12,002	7.94
		LK	17.63	27.43	8.86	0.32	11,743	6.97
LMU - 5	AREA A1, A2 AND A3 COMBINED	UK2	43.42	28.39	6.99	0.27	11,960	7.13
		UK1	4.80	28.39	8.51	0.28	11,795	6.44
		LK	18.66	28.34	7.30	0.29	11,934	7.04
LMU - 6	AREA B1 AND B2 COMBINED	UK2	45.61	28.65	7.18	0.29	12,674	8.73
		LK	18.54	28.82	8.32	0.31	12,605	8.29

LMUs will need 110 to 120 CY draglines. The combined LMUs will require two draglines. For LMUs 1 through 4, the truck-shovel fleet will consist of 25 to 30 CY hydraulic excavators or shovels and 190 to 240 ton trucks.

Coal, when exposed the top surface of the seam, will need to be cleaned using a rubber tired dozer, or grader to scrape away any remaining loose overburden/interburden or oxidized coal. In addition, the upper portions (6 inches to 1 foot) of both the Upper and Lower Knoblock may need to be removed and wasted to help reduce the sulfur content of the shipped product. One mine in the area (Rosebud) currently is utilizing a pavement cutting machine to remove this top layer of coal and process significantly reduces the sulfur content in their shipped coal.

Coal will be loaded by mining shovels, larger front end loaders or hydraulic excavators into large capacity (up to 320 tons) bottom or rear dump trucks and hauled to a coal handling system. The coal will be crushed in multiple stages to a minus 2 inches product, the size required by most thermal coal customers, and placed into a stockpile or loaded into unit trains for shipment to customers, primarily in the Midwest.

When it is necessary to meet the customer's coal specifications, if may be possible to selectively mine the coal to improve the coal quality. The selective mining process removes zones within each seam that are usually higher in sulfur or sodium thereby resulting in a higher quality product.

As an alternate to truck haulage to the coal handling plant, additional studies may indicate that it is more cost-effective to crush the coal at the mining face, using portable hopper/crushers, and then load the crushed product directly onto overland conveyors for transport to a processing plant or unit train loadout facility.

The general mining sequence for each of the LMUs is shown on Figure 3.2, LMU Mine Plan Layout Map. Table 3.3 lists the production rates selected for the LMUs.

LMU 1 - AREA A1

LMU 3 - AREA B1

LMU 4 - AREA B2

LMU 2 - AREA A2-A3

T 1 S

T 2 S

T 3 S

T 4 S

T 5 S

LEGEND

- TOPO
- LMU BOUNDARY
- TRACT BOUNDARY
- YEAR 1
- YEAR 2
- YEAR 3
- YEAR 4
- YEAR 5
- YEAR 11 TO 15
- YEAR 11 TO 15
- YEAR 16 TO 20
- YEAR 20 TO 25
- YEAR 26 TO 30
- YEAR 31 TO 35
- YEAR 36 TO 40
- YEAR 41 TO 45

N

0 1000 2000 3000 4000 5000

FEET

GREAT NORTHERN PROPERTIES

EXHIBIT 3.2

OTTER CREEK PROJECT

LMU MINE PLAN LAYOUT MAP

DATE: 11/14/2005	SCALE: 1"=4000'	NORWEST CORPORATION
DRAWING: LMU	DRAWN BY: JRH	

Table 3.3 Production Rate by LMU

LMU	Yearly Production Rate (Tons)
1	8,500,000
2	12,700,000
3	6,000,000
4	6,000,000
5	21,200,000
6	12,000,000

Mining Cost Estimate

Norwest developed a mining cost estimate for each LMU. Mining costs were based on an assessment of the volumes of waste and coal that would be moved over the life of the mine. When using dragline mining systems, as the overburden depths increase, some of the in-situ overburden needs to be moved twice (rehandled) by the dragline. Rehandle can range from 0% to 50% of the in-situ waste material – for the purpose of this study Norwest estimated the dragline rehandle at 25% of the dragline waste volumes (maximum 150 feet of overburden) and truck-shovel rehandle was estimated at 5%. All in-situ waste volumes were increased to reflect the appropriate rehandle percentage by material type. Table 3.4 LMU Mine Plan Volumes show the coal and overburden removal requirement in annual and 5 year increments for each LMU.

Mining costs were calculated based on unit mining costs derived from actual and projected mining costs from mines having similar mining conditions. The estimated final waste volumes and coal tons shown in Table 3.4 where used as inputs to the economic model. Tables 3.5 through 3.10 show the estimated mining costs for the individual LMUs. The average life-of-mine costs for the six LMU range from $6.69 per ton to $7.65 per ton.

Mining capital was estimated for each LMU. Table 3.11, Capital Expenditures shows the projected capital expenditures for development, mine infrastructure, coal handling plant, overburden and coal loading trucks and shovels, reclamation equipment and various support equipment including rubber tired dozers, graders, large dozers, water trucks, overburden and coal drills.

Table 3.4 Great Northern Properties LMU Mine Plan Volumes

	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 to 10	Year 11 to 15	Year 16 to 20	Year 21 to 25	Year 26 to 30	Year 31 to 35	Year 36 to 40	Year 41 to 45	TOTALS
LMU 1 - AREA A1															
Coal Tons	**TONS**	**3,500,000**	**8,500,000**	**8,500,000**	**8,500,000**	**8,500,000**	**42,500,000**	**42,500,000**	**42,500,000**	**42,500,000**	**42,500,000**	**42,500,000**	**42,400,000**	**100,000**	**335,000,000**
In-Situ Dragline Volumes	**BCY**	**5,700,000**	**16,500,000**	**20,400,000**	**18,300,000**	**18,900,000**	**104,000,000**	**104,600,000**	**92,200,000**	**94,300,000**	**98,300,000**	**100,100,000**	**101,800,000**	**200,000**	**775,300,000**
In-Situ Truck-Shovel Volumes	**BCY**	**200,000**	**600,000**	**2,200,000**	**1,200,000**	**3,100,000**	**26,900,000**	**33,700,000**	**15,500,000**	**19,500,000**	**34,800,000**	**70,000,000**	**48,600,000**	**0**	**256,300,000**
Dragline Volumes with Rehandle	**BCY**	**7,125,000**	**20,625,000**	**25,500,000**	**22,875,000**	**23,625,000**	**130,000,000**	**130,750,000**	**115,250,000**	**117,875,000**	**122,875,000**	**125,125,000**	**127,250,000**	**250,000**	**969,125,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**210,000**	**630,000**	**2,310,000**	**1,260,000**	**3,255,000**	**28,245,000**	**35,385,000**	**16,275,000**	**20,475,000**	**36,540,000**	**73,500,000**	**51,030,000**	**0**	**269,115,000**
Effective Strip Ratio	**BCY ; TON**	**2.10**	**2.50**	**3.27**	**2.84**	**3.16**	**3.72**	**3.91**	**3.09**	**3.26**	**3.75**	**4.67**	**4.20**	**2.50**	**3.70**
	BCY														
LMU 2 - AREA A2 - A3															
Coal Tons	**TONS**	**5,100,000**	**12,700,000**	**12,700,000**	**12,700,000**	**12,700,000**	**63,500,000**	**63,500,000**	**63,500,000**	**63,600,000**	**63,500,000**	**63,500,000**	**61,300,000**	**200,000**	**498,500,000**
In-Situ Dragline Volumes	**BCY**	**5,300,000**	**17,800,000**	**22,000,000**	**24,400,000**	**25,000,000**	**130,400,000**	**133,000,000**	**131,100,000**	**142,100,000**	**144,800,000**	**143,600,000**	**139,700,000**	**300,000**	**1,059,500,000**
In-Situ Truck-Shovel Volumes	**BCY**	**400,000**	**700,000**	**1,800,000**	**2,300,000**	**4,200,000**	**28,100,000**	**34,700,000**	**35,500,000**	**58,300,000**	**60,600,000**	**73,100,000**	**109,700,000**	**200,000**	**409,600,000**
Dragline Volumes with Rehandle	**BCY**	**6,625,000**	**22,250,000**	**27,500,000**	**30,500,000**	**31,250,000**	**163,000,000**	**166,250,000**	**163,875,000**	**177,625,000**	**181,000,000**	**179,500,000**	**174,625,000**	**375,000**	**1,324,375,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**420,000**	**755,000**	**1,995,000**	**3,565,000**	**8,580,000**	**39,100,000**	**40,470,000**	**61,095,000**	**73,165,000**	**98,290,000**	**162,295,000**	**132,190,000**	**210,000**	**622,130,000**
Effective Strip Ratio	**BCY ; TON**	**1.38**	**1.81**	**2.32**	**2.68**	**3.14**	**3.18**	**3.26**	**3.54**	**3.94**	**4.40**	**5.38**	**5.01**	**2.93**	**3.90**
LMU 3 - AREA B1															
Coal Tons	**TONS**	**2,400,000**	**6,000,000**	**6,000,000**	**6,000,000**	**6,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**700,000**	**237,100,000**
In-Situ Dragline Volumes	**BCY**	**5,200,000**	**13,400,000**	**14,240,000**	**14,140,000**	**13,028,000**	**66,804,000**	**78,980,000**	**89,028,000**	**91,968,000**	**108,412,000**	**111,592,000**	**121,344,000**	**3,184,000**	**731,320,000**
In-Situ Truck-Shovel Volumes	**BCY**	**100,000**	**300,000**	**823,810**	**823,810**	**928,571**	**7,576,190**	**15,742,857**	**23,080,952**	**26,323,810**	**45,919,048**	**52,204,762**	**68,438,095**	**1,885,714**	**244,147,619**
Dragline Volumes with Rehandle	**BCY**	**6,500,000**	**16,750,000**	**17,800,000**	**17,675,000**	**16,285,000**	**83,505,000**	**98,725,000**	**111,285,000**	**114,960,000**	**135,515,000**	**139,490,000**	**151,680,000**	**3,980,000**	**914,150,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**105,000**	**315,000**	**865,000**	**865,000**	**975,000**	**7,955,000**	**16,530,000**	**24,235,000**	**27,640,000**	**48,215,000**	**54,815,000**	**71,860,000**	**1,980,000**	**256,355,000**
Effective Strip Ratio	**BCY ; TON**	**2.75**	**2.84**	**3.11**	**3.09**	**2.88**	**3.05**	**3.84**	**4.52**	**4.75**	**6.12**	**6.48**	**7.45**	**8.51**	**4.94**
LMU 4 - AREA B2															
Coal Tons	**TONS**	**2,400,000**	**6,000,000**	**6,000,000**	**6,000,000**	**6,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**30,000,000**	**1,600,000**	**238,000,000**
In-Situ Dragline Volumes	**BCY**	**4,500,000**	**7,300,000**	**7,400,000**	**8,700,000**	**9,000,000**	**51,900,000**	**55,300,000**	**62,200,000**	**62,200,000**	**61,800,000**	**71,200,000**	**73,700,000**	**3,600,000**	**478,800,000**
In-Situ Truck-Shovel Volumes	**BCY**	**100,000**	**300,000**	**400,000**	**600,000**	**400,000**	**3,100,000**	**7,000,000**	**13,700,000**	**11,300,000**	**13,400,000**	**25,800,000**	**43,500,000**	**5,000,000**	**124,600,000**
Dragline Volumes with Rehandle	**BCY**	**5,625,000**	**9,125,000**	**9,250,000**	**10,875,000**	**11,250,000**	**64,875,000**	**69,125,000**	**77,750,000**	**77,750,000**	**77,250,000**	**89,000,000**	**92,125,000**	**4,500,000**	**598,500,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**105,000**	**315,000**	**420,000**	**630,000**	**420,000**	**3,255,000**	**7,350,000**	**14,385,000**	**11,865,000**	**14,070,000**	**27,090,000**	**45,675,000**	**5,250,000**	**130,830,000**
Effective Strip Ratio	**BCY ; TON**	**2.39**	**1.57**	**1.61**	**1.92**	**1.95**	**2.27**	**2.55**	**3.07**	**2.99**	**3.04**	**3.87**	**4.59**	**6.09**	**3.06**
LMU 5 - AREA A1, A2 AND A3															
Coal Tons	**TONS**	**8,600,000**	**21,200,000**	**21,200,000**	**21,200,000**	**21,200,000**	**106,000,000**	**106,000,000**	**106,000,000**	**106,100,000**	**106,000,000**	**106,000,000**	**103,700,000**	**300,000**	**833,500,000**
In-Situ Dragline Volumes	**BCY**	**11,000,000**	**34,300,000**	**42,400,000**	**42,700,000**	**43,900,000**	**234,400,000**	**237,600,000**	**223,300,000**	**236,400,000**	**243,100,000**	**243,700,000**	**241,500,000**	**500,000**	**1,834,800,000**
In-Situ Truck-Shovel Volumes	**BCY**	**600,000**	**1,100,000**	**2,200,000**	**2,700,000**	**4,600,000**	**30,200,000**	**36,900,000**	**37,600,000**	**60,400,000**	**62,700,000**	**75,200,000**	**111,800,000**	**200,000**	**426,200,000**
Dragline Volumes with Rehandle	**BCY**	**13,750,000**	**42,875,000**	**53,000,000**	**53,375,000**	**54,875,000**	**293,000,000**	**297,000,000**	**279,125,000**	**295,500,000**	**303,875,000**	**304,625,000**	**301,875,000**	**625,000**	**2,293,500,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**630,000**	**1,385,000**	**4,305,000**	**4,825,000**	**11,835,000**	**67,345,000**	**75,855,000**	**77,370,000**	**93,640,000**	**134,830,000**	**235,795,000**	**183,220,000**	**210,000**	**891,245,000**
Effective Strip Ratio	**BCY ; TON**	**1.67**	**2.09**	**2.70**	**2.75**	**3.15**	**3.40**	**3.52**	**3.36**	**3.67**	**4.14**	**5.10**	**4.68**	**2.78**	**3.82**
LMU 6 - AREA B1 AND B2 COMBINED															
Coal Tons	**TONS**	**4,800,000**	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**	**60,000,000**	**60,000,000**	**60,000,000**	**60,000,000**	**60,000,000**	**60,000,000**	**60,000,000**	**2,300,000**	**475,100,000**
In-Situ Dragline Volumes	**BCY**	**9,700,000**	**20,700,000**	**21,640,000**	**22,840,000**	**22,028,000**	**118,704,000**	**134,280,000**	**151,228,000**	**154,168,000**	**170,212,000**	**182,792,000**	**195,044,000**	**6,784,000**	**1,210,120,000**
In-Situ Truck-Shovel Volumes	**BCY**	**200,000**	**600,000**	**1,223,810**	**1,423,810**	**1,328,571**	**10,676,190**	**22,742,857**	**36,780,952**	**37,623,810**	**59,319,048**	**78,004,762**	**111,938,095**	**6,885,714**	**368,747,619**
Dragline Volumes with Rehandle	**BCY**	**12,125,000**	**25,875,000**	**27,050,000**	**28,550,000**	**27,535,000**	**148,380,000**	**167,850,000**	**189,035,000**	**192,710,000**	**212,765,000**	**228,490,000**	**243,805,000**	**8,480,000**	**1,512,650,000**
Truck-Shovel Volumes with Rehandle	**BCY**	**210,000**	**630,000**	**1,285,000**	**1,495,000**	**1,395,000**	**11,210,000**	**23,880,000**	**38,620,000**	**39,505,000**	**62,285,000**	**81,905,000**	**117,535,000**	**7,230,000**	**387,185,000**
Effective Strip Ratio	**BCY ; TON**	**2.57**	**2.21**	**2.36**	**2.50**	**2.41**	**2.66**	**3.20**	**3.79**	**3.87**	**4.58**	**5.17**	**6.02**	**6.83**	**4.00**

Table 3.5 LMU 1 - A2 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	3,684	8,947	8,947	8,947	8,947	44,737	44,737	44,737	44,737	44,737	44,737	44,632	211	352,737
Tons Sold (000s)	95.0%	Recovery	3,500	8,500	8,500	8,500	8,500	42,500	42,500	42,500	42,500	42,500	42,500	42,400	200	335,100
BCY - DRAGLINE Produced (000s)			7,125	19,000	24,500	22,750	24,750	123,125	121,875	126,625	124,375	122,125	125,750	127,000	375	969,375
BCY - TRUCK/SHOVEL Produced (000s)			210	420	1,365	1,890	3,360	14,280	24,465	31,605	32,235	40,530	68,985	49,560	210	269,115
Total Units (BCY+ tons)			10,835	27,920	34,365	33,140	36,610	179,905	188,840	200,730	199,110	205,155	237,235	218,960	785	1,573,590
Strip Ratio (BCY /ROM Ton)			2.10	2.28	3.04	2.90	3.31	3.23	3.44	3.72	3.68	3.83	4.58	4.16	2.93	2.75
BTU/lb (DB)			11,818	11,885	11,960	11,906	11,884	11,953	11,954	11,935	11,913	11,902	11,998	11,927	11,925	11,936
Sulfur % (DB)			0.25	0.25	0.26	0.25	0.26	0.26	0.26	0.26	0.27	0.27	0.26	0.25	0.24	0.26
LbSO2/MBTU			0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.43	0.45	0.46	0.44	0.42	0.40	0.44
Sodium in Ash%			8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38
CASH PRODUCTION COSTS																
Controlable Costs																
Labor, Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	2,138	5,700	7,350	6,825	7,425	36,938	36,563	37,988	37,313	36,638	37,725	38,100	113	290,813
OB Truckj - Shovel	0.400	$/BCY	84	168	546	756	1,344	5,712	9,786	12,642	12,894	16,212	27,594	19,824	84	107,646
Drilling & Explosives	0.220	$/UNIT	3,194	8,111	9,529	9,259	10,023	49,421	51,387	54,003	53,646	54,976	62,034	57,990	219	423,792
Coal Loading - Haullage	0.250	$/TON	875	2,125	2,125	2,125	2,125	10,625	10,625	10,625	10,625	10,625	10,625	10,600	50	83,775
Other Support Equipment	0.200	$/TON	700	1,700	1,700	1,700	1,700	8,500	8,500	8,500	8,500	8,500	8,500	8,480	40	67,020
Other Supplies & Services	0.100	$/TON	350	850	850	850	850	4,250	4,250	4,250	4,250	4,250	4,250	4,240	20	33,510
Coal Handling Plant	0.200	$/TON	700	1,700	1,700	1,700	1,700	8,500	8,500	8,500	8,500	8,500	8,500	8,480	40	67,020
Reclamation	0.09	$/TON	315	765	765	765	765	3,825	3,825	3,825	3,825	3,825	3,825	3,816	18	30,159
Total Controllable Costs			**8,356**	**21,119**	**24,565**	**23,980**	**25,932**	**127,771**	**133,435**	**140,332**	**139,553**	**143,526**	**163,053**	**151,530**	**584**	**1,103,734**
$/SALES TON			**2.39**	**2.48**	**2.89**	**2.82**	**3.05**	**3.01**	**3.14**	**3.30**	**3.28**	**3.38**	**3.84**	**3.57**	**2.92**	**3.29**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.308	$/Ton	1,078	2,618	2,618	2,618	2,618	13,090	13,090	13,090	13,090	13,090	13,090	13,059	62	103,211
Severance Tax	15.0%	% of Revenue	2,949	7,162	7,162	7,162	7,162	35,808	35,808	35,808	35,808	35,808	35,808	35,724	169	282,339
Gross Receipts Tax	5.0%	% of Revenue	983	2,387	2,387	2,387	2,387	11,936	11,936	11,936	11,936	11,936	11,936	11,908	56	94,113
Reclamation Fees	0.350	$/Ton	1,225	2,975	2,975	2,975	2,975	14,875	14,875	14,875	14,875	14,875	14,875	14,840	70	117,285
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	108	279	344	331	366	1,799	1,888	2,007	1,991	2,052	2,372	2,190	8	15,736
Corporate Overhead + Joint Facilities	0.090	$/Unit	975	2,513	3,093	2,983	3,295	16,191	16,996	18,066	17,920	18,464	21,351	19,706	71	141,623
Other	0.050	$/Unit	542	1,396	1,718	1,657	1,831	8,995	9,442	10,037	9,956	10,258	11,862	10,948	39	78,680
Total Non-Controllable Cash Costs			**8,010**	**19,480**	**20,447**	**20,263**	**20,783**	**102,845**	**104,186**	**105,969**	**105,726**	**106,633**	**111,445**	**108,525**	**624**	834,936
$/SALES TON			**2.29**	**2.29**	**2.41**	**2.38**	**2.45**	**2.42**	**2.45**	**2.49**	**2.49**	**2.51**	**2.62**	**2.56**	**3.12**	**2.49**
TOTAL CASH COSTS			**16,366**	**40,599**	**45,011**	**44,243**	**46,715**	**230,616**	**237,621**	**246,301**	**245,279**	**250,158**	**274,498**	**260,056**	**1,208**	1,938,670
$/SALES TON			4.68	4.78	5.30	5.21	5.50	5.43	5.59	5.80	5.77	5.89	6.46	6.13	6.04	5.79
NON-CASH COSTS							-									
Depreciation		$/Unit	12,205	12,205	12,205	12,205	12,205	61,025	61,025	61,025	38,275	38,275	38,275	38,275		397,200
Total Non-Cash Costs			**12,205**	**12,205**	**12,205**	**12,205**	**12,205**	**61,025**	**61,025**	**61,025**	**38,275**	**38,275**	**38,275**	**38,275**	**0**	397,200
$/SALES TON			**3.49**	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	**0.90**	**0.90**	**0.90**	**0.90**	-	**1.19**
TOTAL MINING COSTS			**28,571**	**52,804**	**57,216**	**56,448**	**58,920**	**291,641**	**298,646**	**307,326**	**283,554**	**288,433**	**312,773**	**298,331**	**1,208**	2,335,870
$/SALES TON			**8.16**	**6.21**	**6.73**	**6.64**	**6.93**	**6.86**	**7.03**	**7.23**	**6.67**	**6.79**	**7.36**	**7.04**	**6.04**	**6.97**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**9,000**															
Coal Hanling Plant	**28,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**-**															
Dragline - 110 cyd	**46,000**															
30 cyd Rock Shovel	**4,300**															
30 cyd Rock Shovel	**-**															-
210 to 240 Ton Rock Trucks	**13,800**															
20 cyd Coal Excavators	**6,400**															-
290 to 320 Coal Bottom Dump Trucks	**19,200**															-
Mobile Equipment	**13,340**															
Reclamation Equipment	**4,200**															

Table 3.6 LMU 2 -A2-A3 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	5,368	13,368	13,368	13,368	13,368	66,842	66,842	66,842	66,947	66,842	66,842	64,526	211	524,737
Tons Sold (000s)	95.0%	Recovery	5,100	12,700	12,700	12,700	12,700	63,500	63,500	63,500	63,600	63,500	63,500	61,300	200	498,500
BCY - DRAGLINE Produced (000s)			11,750	34,000	43,125	44,125	52,250	236,625	241,500	249,875	248,500	246,500	255,875	246,875	375	1,911,375
BCY - TRUCK/SHOVEL Produced (000s)			420	755	1,995	3,565	8,580	39,100	40,470	61,095	73,165	98,290	162,295	132,190	210	622,130
Total Units (BCY+ tons)			17,270	47,455	57,820	60,390	73,530	339,225	345,470	374,470	385,265	408,290	481,670	440,365	785	3,032,005
Strip Ratio (BCY /ROM Ton)			2.39	2.74	3.55	3.76	4.79	4.34	4.44	4.90	5.06	5.43	6.59	6.18	2.93	5.08
BTU/lb (DB)			11,955	11,978	11,971	12,005	11,993	11,992	11,938	11,970	11,970	11,977	11,978	11,974	11,981	11,973
Sulfur % (DB)			0.30	0.30	0.30	0.29	0.30	0.30	0.29	0.28	0.28	0.28	0.28	0.28	0.26	0.29
LbSO2/MBTU			0.51	0.50	0.50	0.49	0.50	0.49	0.48	0.47	0.47	0.47	0.47	0.47	0.44	0.48
Sodium in Ash%			7.60	7.76	7.77	7.89	7.22	7.16	7.20	7.32	7.31	7.34	7.25	7.26	7.36	7.31
CASH PRODUCTION COSTS																
Controlable Costs																
Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	3,525	10,200	12,938	13,238	15,675	70,988	72,450	74,963	74,550	73,950	76,763	74,063	113	573,413
OB Truckj - Shovel	0.400	$/BCY	168	302	798	1,426	3,432	15,640	16,188	24,438	29,266	39,316	64,918	52,876	84	248,852
Drilling & Explosives	0.220	$/UNIT	7,112	13,793	16,529	16,839	19,273	74,585	76,031	78,554	78,141	77,543	80,356	77,655	3,707	620,117
Coal Loading - Haullage	0.250	$/TON	1,275	3,175	3,175	3,175	3,175	15,875	15,875	15,875	15,900	15,875	15,875	15,325	50	124,625
Other Support Equipment	0.200	$/TON	1,020	2,540	2,540	2,540	2,540	12,700	12,700	12,700	12,720	12,700	12,700	12,260	40	99,700
Other Supplies & Services	0.100	$/TON	510	1,270	1,270	1,270	1,270	6,350	6,350	6,350	6,360	6,350	6,350	6,130	20	49,850
Coal Handling Plant	0.200	$/TON	1,020	2,540	2,540	2,540	2,540	12,700	12,700	12,700	12,720	12,700	12,700	12,260	40	99,700
Reclamation	0.09	$/TON	38	68	180	321	772	3,519	3,642	5,499	6,585	8,846	14,607	11,897	19	55,992
Total Controllable Costs			**14,667**	**33,888**	**39,969**	**41,348**	**48,677**	**212,356**	**215,937**	**231,078**	**236,242**	**247,280**	**284,268**	**262,465**	**4,072**	**1,872,249**
$/SALES TON			**2.88**	**2.67**	**3.15**	**3.26**	**3.83**	**3.34**	**3.40**	**3.64**	**3.71**	**3.89**	**4.48**	**4.28**	**20.36**	**3.76**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.550	$/Ton	1,571	3,912	3,912	3,912	3,912	19,558	19,558	19,558	19,589	19,558	19,558	18,880	62	153,538
Severance Tax	15.0%	% of Revenue	4,297	10,700	10,700	10,700	10,700	53,502	53,502	53,502	53,586	53,502	53,502	51,648	169	420,011
Gross Receipts Tax	5.0%	% of Revenue	1,432	3,567	3,567	3,567	3,567	17,834	17,834	17,834	17,862	17,834	17,834	17,216	56	140,004
Reclamation Fees	0.350	$/Ton	1,785	4,445	4,445	4,445	4,445	22,225	22,225	22,225	22,260	22,225	22,225	21,455	70	174,475
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	173	475	578	604	735	3,392	3,455	3,745	3,853	4,083	4,817	4,404	8	30,320
Corporate Overhead + Joint Facilities	0.090	$/Unit	1,554	4,271	5,204	5,435	6,618	30,530	31,092	33,702	34,674	36,746	43,350	39,633	71	272,880
Other	0.050	$/Unit	864	2,373	2,891	3,020	3,677	16,961	17,274	18,724	19,263	20,415	24,084	22,018	39	151,600
Total Non-Controllable Cash Costs			**11,826**	**29,892**	**31,447**	**31,832**	**33,803**	**164,153**	**165,089**	**169,439**	**171,237**	**174,512**	**185,519**	**175,405**	**624**	1,344,779
$/SALES TON			**2.32**	**2.35**	**2.48**	**2.51**	**2.66**	**2.59**	**2.60**	**2.67**	**2.69**	**2.75**	**2.92**	**2.86**	**3.12**	**2.70**
TOTAL CASH COSTS			**26,493**	**63,780**	**71,416**	**73,181**	**82,480**	**376,509**	**381,026**	**400,517**	**407,479**	**421,793**	**469,787**	**437,870**	**4,696**	3,217,027
$/SALES TON			5.19	5.02	5.62	5.76	6.49	5.93	6.00	6.31	6.41	6.64	7.40	7.14	23.48	6.45
NON-CASH COSTS							-									
Depreciation		$/Unit	18,905	18,905	18,905	18,905	18,905	94,525	94,525	94,525	55,025	55,025	55,025	55,025		598,200
Total Non-Cash Costs			**18,905**	**18,905**	**18,905**	**18,905**	**18,905**	**94,525**	**94,525**	**94,525**	**55,025**	**55,025**	**55,025**	**55,025**	**0**	598,200
$/SALES TON			**3.71**	**1.49**	**1.49**	**1.49**	**1.49**	**1.49**	**1.49**	**1.49**	**0.87**	**0.87**	**0.87**	**0.90**	**-**	**1.20**
TOTAL MINING COSTS			**45,398**	**82,685**	**90,321**	**92,086**	**101,385**	**471,034**	**475,551**	**495,042**	**462,504**	**476,818**	**524,812**	**492,895**	**4,696**	3,815,227
$/SALES TON			**8.90**	**6.51**	**7.11**	**7.25**	**7.98**	**7.42**	**7.49**	**7.80**	**7.27**	**7.51**	**8.26**	**8.04**	**23.48**	**7.65**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**21,000**															
Coal Hanling Plant	**37,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**-**															
Dragline - 110 cyd	**92,000**															
30 cyd Rock Shovel	**8,600**															
30 cyd Rock Shovel	**-**															-
210 to 240 Ton Rock Trucks	**27,600**															
20 cyd Coal Excavators	**6,400**															-
290 to 320 Coal Bottom Dump Trucks	**25,600**															-
Mobile Equipment	**15,640**															
Reclamation Equipment	**4,200**															

Table 3.7 LMU 3 - B2 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	2,526	6,316	6,316	6,316	6,316	31,579	31,579	31,579	31,579	31,579	31,579	31,579	737	249,579
Tons Sold (000s)	95.0%	Recovery	2,400	6,000	6,000	6,000	6,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	700	237,100
BCY - DRAGLINE Produced (000s)			6,500	16,750	17,250	17,125	15,625	77,125	83,875	88,625	89,000	88,875	86,250	81,500	2,000	670,500
BCY - TRUCK/SHOVEL Produced (000s)			105	315	865	865	975	7,955	16,530	24,235	27,640	48,215	54,815	71,860	1,980	256,355
Total Units (BCY+ tons)			9,005	23,065	24,115	23,990	22,600	115,080	130,405	142,860	146,640	167,090	171,065	183,360	4,680	1,163,955
Strip Ratio (BCY /ROM Ton)			2.75	2.84	3.02	3.00	2.77	2.84	3.35	3.76	3.89	4.57	4.70	5.11	5.69	2.69
BTU/lb (DB)			12,030	12,007	12,005	12,010	12,019	12,045	12,058	12,023	12,015	11,984	11,976	11,984	11,988	12,012
Sulfur % (DB)			0.29	0.26	0.26	0.26	0.26	0.29	0.28	0.27	0.26	0.26	0.26	0.25	0.25	0.27
LbSO2/MBTU			0.49	0.43	0.44	0.44	0.43	0.48	0.46	0.45	0.44	0.43	0.43	0.41	0.42	0.44
Sodium in Ash%			8.19	7.49	7.44	7.46	7.22	7.90	8.72	8.78	9.04	9.20	9.37	9.20	9.26	8.73
CASH PRODUCTION COSTS																
Controlable Costs																
Labor, Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	1,950	5,025	5,175	5,138	4,688	23,138	25,163	26,588	26,700	26,663	25,875	24,450	600	201,150
OB Truckj - Shovel	0.400	$/BCY	42	126	346	346	390	3,182	6,612	9,694	11,056	19,286	21,926	28,744	792	102,542
Drilling & Explosives	0.220	$/UNIT	2,537	6,464	6,695	6,667	6,361	32,265	35,636	38,377	39,208	43,707	44,582	47,287	1,192	310,977
Coal Loading - Haullage	0.250	$/TON	600	1,500	1,500	1,500	1,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	175	59,275
Other Support Equipment	0.200	$/TON	480	1,200	1,200	1,200	1,200	6,000	6,000	6,000	6,000	6,000	6,000	6,000	140	47,420
Other Supplies & Services	0.100	$/TON	240	600	600	600	600	3,000	3,000	3,000	3,000	3,000	3,000	3,000	70	23,710
Coal Handling Plant	0.200	$/TON	480	1,200	1,200	1,200	1,200	6,000	6,000	6,000	6,000	6,000	6,000	6,000	140	47,420
Reclamation	0.09	$/TON	216	540	540	540	540	2,700	2,700	2,700	2,700	2,700	2,700	2,700	63	21,339
Total Controllable Costs			**6,545**	**16,655**	**17,256**	**17,191**	**16,479**	**83,784**	**92,611**	**99,858**	**102,164**	**114,856**	**117,583**	**125,681**	**3,172**	**813,833**
$/SALES TON			**2.73**	**2.78**	**2.88**	**2.87**	**2.75**	**2.79**	**3.09**	**3.33**	**3.41**	**3.83**	**3.92**	**4.19**	**4.53**	**3.43**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.31	$/Ton	739	1,848	1,848	1,848	1,848	9,240	9,240	9,240	9,240	9,240	9,240	9,240	216	73,027
Severance Tax	15.0%	% of Revenue	2,022	5,055	5,055	5,055	5,055	25,277	25,277	25,277	25,277	25,277	25,277	25,277	590	199,769
Gross Receipts Tax	5.0%	% of Revenue	674	1,685	1,685	1,685	1,685	8,426	8,426	8,426	8,426	8,426	8,426	8,426	197	66,590
Reclamation Fees	0.350	$/Ton	840	2,100	2,100	2,100	2,100	10,500	10,500	10,500	10,500	10,500	10,500	10,500	245	82,985
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	90	231	241	240	226	1,151	1,304	1,429	1,466	1,671	1,711	1,834	47	11,640
Corporate Overhead + Joint Facilities	0.090	$/Unit	810	2,076	2,170	2,159	2,034	10,357	11,736	12,857	13,198	15,038	15,396	16,502	421	104,756
Other	0.050	$/Unit	450	1,153	1,206	1,200	1,130	5,754	6,520	7,143	7,332	8,355	8,553	9,168	234	58,198
Total Non-Controllable Cash Costs			**5,776**	**14,298**	**14,456**	**14,437**	**14,228**	**70,854**	**73,153**	**75,021**	**75,588**	**78,656**	**79,252**	**81,096**	**2,099**	598,913
$/SALES TON			**2.41**	**2.38**	**2.41**	**2.41**	**2.37**	**2.36**	**2.44**	**2.50**	**2.52**	**2.62**	**2.64**	**2.70**	**3.00**	**2.53**
TOTAL CASH COSTS			**12,321**	**30,953**	**31,711**	**31,628**	**30,707**	**154,638**	**165,764**	**174,879**	**177,752**	**193,511**	**196,834**	**206,777**	**5,271**	1,412,747
$/SALES TON			5.13	5.16	5.29	5.27	5.12	5.15	5.53	5.83	5.93	6.45	6.56	6.89	7.53	5.96
NON-CASH COSTS							-									
Depreciation		$/Unit	10,005	10,005	10,005	10,005	10,005	50,025	50,025	50,025	30,775	30,775	30,775	30,775		323,200
Total Non-Cash Costs			**10,005**	**10,005**	**10,005**	**10,005**	**10,005**	**50,025**	**50,025**	**50,025**	**30,775**	**30,775**	**30,775**	**30,775**	**0**	323,200
$/SALES TON			**4.17**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.03**	**1.03**	**1.03**	**1.03**	**-**	**1.36**
TOTAL MINING COSTS			**22,326**	**40,958**	**41,716**	**41,633**	**40,712**	**204,663**	**215,789**	**224,904**	**208,527**	**224,286**	**227,609**	**237,552**	**5,271**	1,735,947
$/SALES TON			**9.30**	**6.83**	**6.95**	**6.94**	**6.79**	**6.82**	**7.19**	**7.50**	**6.95**	**7.48**	**7.59**	**7.92**	**7.53**	**7.32**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**9,000**															
Coal Hanling Plant	**22,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**38,000**															
Dragline - 110 cyd	**-**															
30 cyd Rock Shovel	**-**															
30 cyd Rock Shovel	**3,800**															-
210 to 240 Ton Rock Trucks	**12,600**															
20 cyd Coal Excavators	**3,200**															-
290 to 320 Coal Bottom Dump Trucks	**12,800**															-
Mobile Equipment	**12,640**															
Reclamation Equipment	**4,200**															

Table 3.8 LMU 4 - B2 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	2,526	6,316	6,316	6,316	6,316	31,579	31,579	31,579	31,579	31,579	31,579	31,579	1,684	250,526
Tons Sold (000s)	95.0%	Recovery	2,400	6,000	6,000	6,000	6,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	1,600	238,000
BCY - DRAGLINE Produced (000s)			5,625	9,125	9,250	10,875	11,250	64,875	69,125	77,750	77,750	77,250	89,000	92,125	4,500	598,500
BCY - TRUCK/SHOVEL Produced (000s)			105	315	420	630	420	3,255	7,350	14,385	11,865	14,070	27,090	45,675	5,250	130,830
Total Units (BCY+ tons)			8,130	15,440	15,670	17,505	17,670	98,130	106,475	122,135	119,615	121,320	146,090	167,800	11,350	967,330
Strip Ratio (BCY /ROM Ton)			2.39	1.57	1.61	1.92	1.95	2.27	2.55	3.07	2.99	3.04	3.87	4.59	6.09	2.39
BTU/lb (DB)			12,033	12,042	11,995	11,879	11,926	11,915	11,870	11,955	11,923	11,934	11,951	11,941	11,946	11,932
Sulfur % (DB)			0.29	0.29	0.30	0.32	0.31	0.30	0.31	0.27	0.29	0.30	0.29	0.28	0.27	0.29
LbSO2/MBTU			0.49	0.48	0.50	0.54	0.51	0.51	0.53	0.45	0.49	0.50	0.48	0.47	0.45	0.49
Sodium in Ash%			7.41	7.45	7.44	7.14	7.25	7.83	8.13	8.02	7.58	7.68	7.24	7.52	8.30	7.68
CASH PRODUCTION COSTS																
Controlable Costs																
Labor, Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	1,688	2,738	2,775	3,263	3,375	19,463	20,738	23,325	23,325	23,175	26,700	27,638	1,350	179,550
OB Truckj - Shovel	0.400	$/BCY	42	126	168	252	168	1,302	2,940	5,754	4,746	5,628	10,836	18,270	2,100	52,332
Drilling & Explosives	0.220	$/UNIT	2,344	4,786	4,837	5,241	5,277	28,536	30,372	33,817	33,263	33,638	39,087	43,863	2,868	267,928
Coal Loading - Haullage	0.250	$/TON	600	1,500	1,500	1,500	1,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	400	59,500
Other Support Equipment	0.200	$/TON	480	1,200	1,200	1,200	1,200	6,000	6,000	6,000	6,000	6,000	6,000	6,000	320	47,600
Other Supplies & Services	0.100	$/TON	240	600	600	600	600	3,000	3,000	3,000	3,000	3,000	3,000	3,000	160	23,800
Coal Handling Plant	0.200	$/TON	480	1,200	1,200	1,200	1,200	6,000	6,000	6,000	6,000	6,000	6,000	6,000	320	47,600
Reclamation	0.09	$/TON	216	540	540	540	540	2,700	2,700	2,700	2,700	2,700	2,700	2,700	144	21,420
Total Controllable Costs			**6,090**	**12,690**	**12,820**	**13,795**	**13,860**	**74,500**	**79,249**	**88,096**	**86,534**	**87,641**	**101,823**	**114,971**	**7,662**	**699,730**
$/SALES TON			**2.54**	**2.11**	**2.14**	**2.30**	**2.31**	**2.48**	**2.64**	**2.94**	**2.88**	**2.92**	**3.39**	**3.83**	**4.79**	**2.94**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.308	$/Ton	739	1,848	1,848	1,848	1,848	9,240	9,240	9,240	9,240	9,240	9,240	9,240	493	73,304
Severance Tax	15.0%	% of Revenue	2,022	5,055	5,055	5,055	5,055	25,277	25,277	25,277	25,277	25,277	25,277	25,277	1,348	200,527
Gross Receipts Tax	5.0%	% of Revenue	674	1,685	1,685	1,685	1,685	8,426	8,426	8,426	8,426	8,426	8,426	8,426	449	66,842
Reclamation Fees	0.350	$/Ton	840	2,100	2,100	2,100	2,100	10,500	10,500	10,500	10,500	10,500	10,500	10,500	560	83,300
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	81	154	157	175	177	981	1,065	1,221	1,196	1,213	1,461	1,678	114	9,673
Corporate Overhead + Joint Facilities	0.090	$/Unit	732	1,390	1,410	1,575	1,590	8,832	9,583	10,992	10,765	10,919	13,148	15,102	1,022	87,060
Other	0.050	$/Unit	407	772	784	875	884	4,907	5,324	6,107	5,981	6,066	7,305	8,390	568	48,367
Total Non-Controllable Cash Costs			**5,645**	**13,154**	**13,189**	**13,464**	**13,489**	**68,312**	**69,563**	**71,912**	**71,534**	**71,790**	**75,506**	**78,762**	**4,703**	571,023
$/SALES TON			**2.35**	**2.19**	**2.20**	**2.24**	**2.25**	**2.28**	**2.32**	**2.40**	**2.38**	**2.39**	**2.52**	**2.63**	**2.94**	**2.40**
TOTAL CASH COSTS			**11,735**	**25,844**	**26,009**	**27,259**	**27,349**	**142,812**	**148,813**	**160,008**	**158,068**	**159,431**	**177,329**	**193,733**	**12,364**	1,270,753
$/SALES TON			4.89	4.31	4.33	4.54	4.56	4.76	4.96	5.33	5.27	5.31	5.91	6.46	7.73	5.34
NON-CASH COSTS							-									
Depreciation		$/Unit	10,255	10,255	10,255	10,255	10,255	51,275	51,275	51,275	30,775	30,775	30,775	30,775		328,200
Total Non-Cash Costs			**10,255**	**10,255**	**10,255**	**10,255**	**10,255**	**51,275**	**51,275**	**51,275**	**30,775**	**30,775**	**30,775**	**30,775**	**0**	328,200
$/SALES TON			**4.27**	**1.71**	**1.71**	**1.71**	**1.71**	**1.71**	**1.71**	**1.71**	**1.03**	**1.03**	**1.03**	**1.03**	**-**	**1.38**
TOTAL MINING COSTS			**21,990**	**36,099**	**36,264**	**37,514**	**37,604**	**194,087**	**200,088**	**211,283**	**188,843**	**190,206**	**208,104**	**224,508**	**12,364**	1,598,953
$/SALES TON			**9.16**	**6.02**	**6.04**	**6.25**	**6.27**	**6.47**	**6.67**	**7.04**	**6.29**	**6.34**	**6.94**	**7.48**	**7.73**	**6.72**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**14,000**															
Coal Hanling Plant	**22,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**38,000**															
Dragline - 110 cyd	**-**															
30 cyd Rock Shovel	**-**															
30 cyd Rock Shovel	**3,800**															-
210 to 240 Ton Rock Trucks	**12,600**															
20 cyd Coal Excavators	**3,200**															-
290 to 320 Coal Bottom Dump Trucks	**12,800**															-
Mobile Equipment	**12,640**															
Reclamation Equipment	**4,200**															

Table 3. 9 LMU 5 -A1-A2-A3 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	9,053	22,316	22,316	22,316	22,316	111,579	111,579	111,579	111,684	111,579	111,579	109,158	316	877,368
Tons Sold (000s)	95.0%	Recovery	8,600	21,200	21,200	21,200	21,200	106,000	106,000	106,000	106,100	106,000	106,000	103,700	300	833,500
BCY - DRAGLINE Produced (000s)			18,875	54,625	68,625	67,000	75,875	366,625	372,250	365,125	366,375	369,375	381,000	374,125	625	2,880,500
BCY - TRUCK/SHOVEL Produced (000s)			630	1,385	4,305	4,825	11,835	67,345	75,855	77,370	93,640	134,830	235,795	183,220	210	891,245
Total Units (BCY+ tons)			28,105	77,210	94,130	93,025	108,910	539,970	554,105	548,495	566,115	610,205	722,795	661,045	1,135	4,605,245
Strip Ratio (BCY /ROM Ton)			2.27	2.64	3.44	3.39	4.14	4.09	4.23	4.17	4.34	4.76	5.82	5.37	2.78	3.28
BTU/lb (DB)			11,900	11,940	11,967	11,965	11,949	11,976	11,945	11,956	11,947	11,946	11,986	11,955	11,958	11,958
Sulfur % (DB)			0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.28	0.27	0.27	0.25	0.28
LbSO2/MBTU			0.48	0.47	0.47	0.46	0.47	0.47	0.46	0.45	0.46	0.47	0.46	0.45	0.43	0.46
Sodium in Ash%			7.92	7.94	7.58	8.01	7.61	7.18	6.96	6.97	6.89	6.68	7.34	7.42	7.36	7.14
CASH PRODUCTION COSTS																
Controlable Costs																
Labor, Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	5,663	16,388	20,588	20,100	22,763	109,988	111,675	109,538	109,913	110,813	114,300	112,238	188	864,150
OB Truckj - Shovel	0.400	$/BCY	252	554	1,722	1,930	4,734	26,938	30,342	30,948	37,456	53,932	94,318	73,288	84	356,498
Drilling & Explosives	0.220	$/UNIT	8,175	21,896	25,618	25,375	28,870	143,341	146,450	145,216	149,116	158,792	183,562	169,445	319	1,206,175
Coal Loading - Haullage	0.250	$/TON	2,150	5,300	5,300	5,300	5,300	26,500	26,500	26,500	26,525	26,500	26,500	25,925	75	208,375
Other Support Equipment	0.200	$/TON	1,720	4,240	4,240	4,240	4,240	21,200	21,200	21,200	21,220	21,200	21,200	20,740	60	166,700
Other Supplies & Services	0.100	$/TON	860	2,120	2,120	2,120	2,120	10,600	10,600	10,600	10,610	10,600	10,600	10,370	30	83,350
Coal Handling Plant	0.200	$/TON	1,720	4,240	4,240	4,240	4,240	21,200	21,200	21,200	21,220	21,200	21,200	20,740	60	166,700
Reclamation	0.09	$/TON	774	1,908	1,908	1,908	1,908	9,540	9,540	9,540	9,549	9,540	9,540	9,333	27	75,015
Total Controllable Costs			**21,313**	**56,645**	**65,736**	**65,213**	**74,174**	**369,306**	**377,507**	**374,742**	**385,608**	**412,577**	**481,220**	**442,078**	**843**	**3,126,963**
$/SALES TON			**2.48**	**2.67**	**3.10**	**3.08**	**3.50**	**3.48**	**3.56**	**3.54**	**3.63**	**3.89**	**4.54**	**4.26**	**2.81**	**3.75**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.308	$/Ton	2,649	6,530	6,530	6,530	6,530	32,648	32,648	32,648	32,679	32,648	32,648	31,940	92	256,718
Severance Tax	15.0%	% of Revenue	7,246	17,862	17,862	17,862	17,862	89,310	89,310	89,310	89,395	89,310	89,310	87,372	253	702,265
Gross Receipts Tax	5.0%	% of Revenue	2,415	5,954	5,954	5,954	5,954	29,770	29,770	29,770	29,798	29,770	29,770	29,124	84	234,088
Reclamation Fees	0.350	$/Ton	3,010	7,420	7,420	7,420	7,420	37,100	37,100	37,100	37,135	37,100	37,100	36,295	105	291,725
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	281	772	941	930	1,089	5,400	5,541	5,485	5,661	6,102	7,228	6,610	11	46,052
Corporate Overhead + Joint Facilities	0.090	$/Unit	2,529	6,949	8,472	8,372	9,802	48,597	49,869	49,365	50,950	54,918	65,052	59,494	102	414,472
Other	0.050	$/Unit	1,405	3,861	4,707	4,651	5,446	26,999	27,705	27,425	28,306	30,510	36,140	33,052	57	230,262
Total Non-Controllable Cash Costs			**19,686**	**49,497**	**52,035**	**51,869**	**54,252**	**269,974**	**272,094**	**271,253**	**274,074**	**280,509**	**297,398**	**284,038**	**855**	2,177,534
$/SALES TON			**2.29**	**2.33**	**2.45**	**2.45**	**2.56**	**2.55**	**2.57**	**2.56**	**2.58**	**2.65**	**2.81**	**2.74**	**2.85**	**2.61**
TOTAL CASH COSTS			**40,999**	**106,142**	**117,771**	**117,082**	**128,426**	**639,280**	**649,602**	**645,994**	**659,682**	**693,086**	**778,618**	**726,116**	**1,697**	5,304,497
$/SALES TON			4.77	5.01	5.56	5.52	6.06	6.03	6.13	6.09	6.22	6.54	7.35	7.00	5.66	6.36
NON-CASH COSTS							-									
Depreciation		$/Unit	25,845	25,845	25,845	25,845	25,845	129,225	129,225	129,225	75,975	75,975	75,975	75,975		820,800
Total Non-Cash Costs			**25,845**	**25,845**	**25,845**	**25,845**	**25,845**	**129,225**	**129,225**	**129,225**	**75,975**	**75,975**	**75,975**	**75,975**	**0**	820,800
$/SALES TON			**3.01**	**1.22**	**1.22**	**1.22**	**1.22**	**1.22**	**1.22**	**1.22**	**0.72**	**0.72**	**0.72**	**0.73**	**-**	**0.98**
TOTAL MINING COSTS			**66,844**	**131,987**	**143,616**	**142,927**	**154,271**	**768,505**	**778,827**	**775,219**	**735,657**	**769,061**	**854,593**	**802,091**	**1,697**	6,125,297
$/SALES TON			**7.77**	**6.23**	**6.77**	**6.74**	**7.28**	**7.25**	**7.35**	**7.31**	**6.93**	**7.26**	**8.06**	**7.73**	**5.66**	**7.35**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**15,000**															
Coal Hanling Plant	**52,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**-**															
Dragline - 110 cyd	**138,000**															
30 cyd Rock Shovel	**8,600**															
30 cyd Rock Shovel	**-**															-
210 to 240 Ton Rock Trucks	**27,600**															
20 cyd Coal Excavators	**9,600**															-
290 to 320 Coal Bottom Dump Trucks	**44,800**															-
Mobile Equipment	**22,560**															
Reclamation Equipment	**8,400**															

Table 3.10 LMU 6 B1-B2 Mine Cost Model

	Basis	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 To 10	Year 11 To 15	Year 16 To 20	Year 21 To 25	Year 26 To 30	Year 31 To 35	Year 36 To 40	Year 41 +	Totals
PRODUCTION																
Tons Produced (000s)		tons/yr	5,053	12,632	12,632	12,632	12,632	63,158	63,158	63,158	63,158	63,158	63,158	63,158	2,421	500,105
Tons Sold (000s)	95.0%	Recovery	4,800	12,000	12,000	12,000	12,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	2,300	475,100
BCY - DRAGLINE Produced (000s)			12,125	25,875	26,500	28,000	26,875	142,000	153,000	166,375	166,750	166,125	175,250	173,625	6,500	1,269,000
BCY - TRUCK/SHOVEL Produced (000s)			210	630	1,285	1,495	1,395	11,210	23,880	38,620	39,505	62,285	81,905	117,535	7,230	387,185
Total Units (BCY+ tons)			17,135	38,505	39,785	41,495	40,270	213,210	236,880	264,995	266,255	288,410	317,155	351,160	16,030	2,131,285
Strip Ratio (BCY /ROM Ton)			2.57	2.21	2.32	2.46	2.36	2.55	2.95	3.42	3.44	3.81	4.29	4.85	5.97	2.54
BTU/lb (DB)			12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	12,031	
Sulfur % (DB)			0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	
LbSO2/MBTU			0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	
Sodium in Ash%			7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	
CASH PRODUCTION COSTS																
Controlable Costs																
Labor, Materials and Supplies																
OB Removel Dragline	0.300	$/BCY	3,638	7,763	7,950	8,400	8,063	42,600	45,900	49,913	50,025	49,838	52,575	52,088	1,950	380,700
OB Truckj - Shovel	0.400	$/BCY	84	252	514	598	558	4,484	9,552	15,448	15,802	24,914	32,762	47,014	2,892	154,874
Drilling & Explosives	0.220	$/UNIT	4,881	11,250	11,532	11,908	11,638	60,801	66,008	72,194	72,471	77,345	83,669	91,150	4,059	578,906
Coal Loading - Haullage	0.250	$/TON	1,200	3,000	3,000	3,000	3,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	575	118,775
Other Support Equipment	0.200	$/TON	960	2,400	2,400	2,400	2,400	12,000	12,000	12,000	12,000	12,000	12,000	12,000	460	95,020
Other Supplies & Services	0.100	$/TON	480	1,200	1,200	1,200	1,200	6,000	6,000	6,000	6,000	6,000	6,000	6,000	230	47,510
Coal Handling Plant	0.200	$/TON	960	2,400	2,400	2,400	2,400	12,000	12,000	12,000	12,000	12,000	12,000	12,000	460	95,020
Reclamation	0.09	$/TON	432	1,080	1,080	1,080	1,080	5,400	5,400	5,400	5,400	5,400	5,400	5,400	207	42,759
Total Controllable Costs			**12,635**	**29,345**	**30,076**	**30,986**	**30,339**	**158,285**	**171,860**	**187,954**	**188,698**	**202,496**	**219,406**	**240,651**	**10,833**	**1,513,564**
$/SALES TON			**2.63**	**2.45**	**2.51**	**2.58**	**2.53**	**2.64**	**2.86**	**3.13**	**3.14**	**3.37**	**3.66**	**4.01**	**4.71**	**3.19**
NON-CONTROLLABLE COSTS																
Black Lung Tax	0.308	$/Ton	1,478	3,696	3,696	3,696	3,696	18,480	18,480	18,480	18,480	18,480	18,480	18,480	708	146,331
Severance Tax	15.0%	% of Revenue	4,044	10,111	10,111	10,111	10,111	50,553	50,553	50,553	50,553	50,553	50,553	50,553	1,938	400,296
Gross Receipts Tax	5.0%	% of Revenue	1,348	3,370	3,370	3,370	3,370	16,851	16,851	16,851	16,851	16,851	16,851	16,851	646	133,432
Reclamation Fees	0.350	$/Ton	1,680	4,200	4,200	4,200	4,200	21,000	21,000	21,000	21,000	21,000	21,000	21,000	805	166,285
Reclamation Bonding (premium)	150	$000s	150	150	150	150	150	150	150	150	150	150	150	150	150	1,950
General Insurance	0.010	$/Unit	171	385	398	415	403	2,132	2,369	2,650	2,663	2,884	3,172	3,512	160	21,313
Corporate Overhead + Joint Facilities	0.090	$/Unit	1,542	3,465	3,581	3,735	3,624	19,189	21,319	23,850	23,963	25,957	28,544	31,604	1,443	191,816
Other	0.050	$/Unit	857	1,925	1,989	2,075	2,014	10,661	11,844	13,250	13,313	14,421	15,858	17,558	802	106,564
Total Non-Controllable Cash Costs			**11,271**	**27,303**	**27,495**	**27,751**	**27,567**	**139,016**	**142,566**	**146,783**	**146,972**	**150,296**	**154,607**	**159,708**	**6,652**	1,167,986
$/SALES TON			**2.35**	**2.28**	**2.29**	**2.31**	**2.30**	**2.32**	**2.38**	**2.45**	**2.45**	**2.50**	**2.58**	**2.66**	**2.89**	**2.46**
TOTAL CASH COSTS			**23,906**	**56,647**	**57,570**	**58,737**	**57,906**	**297,300**	**314,426**	**334,737**	**335,670**	**352,792**	**374,013**	**400,359**	**17,485**	2,681,550
$/SALES TON			4.98	4.72	4.80	4.89	4.83	4.96	5.24	5.58	5.59	5.88	6.23	6.67	7.60	5.64
NON-CASH COSTS							-									
Depreciation		$/Unit	15,633	15,633	15,633	15,633	15,633	78,163	78,163	78,163	46,163	46,163	46,163	46,163		497,300
Total Non-Cash Costs			**15,633**	**15,633**	**15,633**	**15,633**	**15,633**	**78,163**	**78,163**	**78,163**	**46,163**	**46,163**	**46,163**	**46,163**	**0**	497,300
$/SALES TON			**3.26**	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**	**0.77**	**0.77**	**0.77**	**0.77**	**-**	**1.05**
TOTAL MINING COSTS			**39,538**	**72,280**	**73,203**	**74,369**	**73,539**	**375,463**	**392,589**	**412,900**	**381,833**	**398,954**	**420,176**	**446,522**	**17,485**	3,178,850
$/SALES TON			**8.24**	**6.02**	**6.10**	**6.20**	**6.13**	**6.26**	**6.54**	**6.88**	**6.36**	**6.65**	**7.00**	**7.44**	**7.60**	**6.69**
CAPITAL																
Land Acquisition	**-**															-
Permiting - Engineering	**3,000**															
Exploration Drilling	**2,000**															
Mine Facilities	**9,000**															
Coal Hanling Plant	**35,000**															
Miscellaneous Equipment and supplies	**3,000**															
Dragline - 70 cyd	**76,000**															
Dragline - 110 cyd	**-**															
30 cyd Rock Shovel	**4,300**															
30 cyd Rock Shovel	**-**															-
210 to 240 Ton Rock Trucks	**13,800**															
20 cyd Coal Excavators	**6,400**															-
290 to 320 Coal Bottom Dump Trucks	**25,600**															-
Mobile Equipment	**19,560**															
Reclamation Equipment	**4,200**															

Table 3.11 Great Northern Properties Captial Expenditures

INITIAL EQUIPMENT REQUIREMENTS

EQUIPMENT	LMU 1 AREA A1	LMU 2 AREA A2-A3	LMU 3 AREA A1-A2-A3	LMU 4 AREA B1	LMU 5 AREA B2	LMU 6 AREA B1 -B2	EQUIPMENT COSTS/UNIT
Dragline - 70 cyd				1	1	2	$38,000
Dragline - 110 cyd	1	2	3				$46,000
Coal -Shovel 20 cyd	2	2	3	1	1	2	$3,200
Rock-Shovel 30 cyd	1	2	2			1	$4,300
Rock Shovel 20 cyd				1	1		$3,800
OB Trucks - 210 ton				6	6		$2,100
OB Trucks - 240 ton	6	12	12			6	$2,300
Coal Trucks - 320 ton	6	8	14	4	4	8	$3,200
R.T. Dozers	2	2	3	1	1	2	$700
Dozers	3	3	4	3	3	4	$1,800
Water Trucks	2	2	3	2	2	3	$720
Motor Graders	2	2	3	2	2	3	$1,400
Coal Handling Plant	1	1	1	1	1	1	Varied
Mine Facilities	1	1	1	1	1	1	Varied
OB-Coal Drills	1	2	3	1	1	2	$2,300
Rec - Scrapers	2	2	4	2	2	2	$1,250
Rec - Dozers	1	1	2	1	1	1	$1,800

INITIAL CAPITAL COSTS

Capital x (000's)	LMU 1 AREA A1	LMU 2 AREA A2-A3	LMU 3 AREA A1-A2-A3	LMU 4 AREA B1	LMU 5 AREA B2	LMU 6 AREA B1 -B2
Land Acquisition						
Permitting - Engineering	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Exploration Drilling	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Mine Facilities	$9,000	$21,000	$15,000	$9,000	$14,000	$9,000
Coal Handling Plant	$28,000	$37,000	$52,000	$22,000	$22,000	$35,000
Miscellaneous Equipment and supplies	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Dragline - 70 cyd	$0	$0	$0	$38,000	$38,000	$76,000
Dragline - 110 cyd	$46,000	$92,000	$138,000	$0	$0	$0
30 cyd Rock Shovel	$4,300	$8,600	$8,600	$0	$0	$4,300
30 cyd Rock Shovel	$0	$0	$0	$3,800	$3,800	$0
210 to 240 Ton Rock Trucks	$13,800	$27,600	$27,600	$12,600	$12,600	$13,800
20 cyd Coal Excavators	$6,400	$6,400	$9,600	$3,200	$3,200	$6,400
290 to 320 Coal Bottom Dump Trucks	$19,200	$25,600	$44,800	$12,800	$12,800	$25,600
Mobile Equipment	$13,340	$15,640	$22,560	$12,640	$12,640	$19,560
Reclamation Equipment	$4,300	$4,300	$8,600	$4,300	$4,300	$4,300
TOTAL CAPITAL	**$154,240**	**$248,040**	**$336,560**	**$128,240**	**$133,240**	**$203,860**

MARKETING

ELECTRIC UTILITIES

Montana coal, the Northern PRB, is noted for its higher heating value that most of the Southern PRB mines, its varying sulfur levels and its higher sodium levels. The sodium content of Otter Creek coal ranges from 5.8% to 8.8% and is high in comparison to other coals in the western US. but about the same as other Montana PRB mines. For example: coals from the southern Powder River Basin of Wyoming typically average 1.2% sodium while currently produced coals from Colorado average about 2.5% sodium. Sodium in ash can cause slagging problems in certain types of boilers in electric generating plants. Higher sodium levels generally create greater slagging problems. As a result, most plants avoid burning high sodium coals. Exceptions include the following ten plants which are within the competitive area for Otter Creek currently accept higher sodium coals:

1. St. Clair - Detroit Edison
2. Bell River – Detroit Edison
3. Trenton Channel – Detroit Edison
4. Shiras – Marquette Board of Light & Power
5. Clay-Boswell – Minnesota Power
6. Hoot Lake – Otter Tail Corp.
7. Syl Laskin – Minnesota Power
8. King – Northern States Power
9. Sherburne County – Northern States Power
10. Bay Front (or Bayfront) – Northern States Power

The plants shown in the table would likely constitute the initial target market for Otter Creek coals. The plants are shown on Figure 4.1 numbered from the closest to the most distant plants. Total 2004 volume to these ten plants totaled 20.3 million tons in 2004. Through July of 2005 the annualized total consumption decreased to 16.1 million tons. The difference in consumption rates appears to be due to the intrusion of coal from the Southern PRB. In Table 4.1 below coal quality and delivered prices (discussed below) are also shown.

Table 4.1 Otter Creek Prices of Coal to Potential Customers

					2004 FERC data											2005 FERC through July 2005									
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		P	Q	R	S	T	U	V	W	X	Y
	Company Name	Plant Name	State	Source	Quantity - K tons	Btu Content / #	Sulfur %	Ash %	Cost - ¢/Mbtu	U.S. $ / ton	Miles	Rate	Barge $/ton	FOB O.C.		Quantity - K tons	Btu Content / #	Sulfur %	Ash %	Cost - ¢/Mbtu	U.S. $ / ton	Barge $/ton	FOB O.C.	Contract / Spot	Creek Mine
1	Otter Tail Corporation	Hoot Lake	MN	Spring Creek	442	9,258	0.38	4.6	143.38	$ 26.55	600	$ 0.021	$ 12.60	$ 13.95		341	9,247	0.37	4.8	158.42	$ 29.30	$ 12.60	$ 16.70	C-12/07	$ 10.00
2	No States / So MNMuni Pwr Agy	Sherburne County 3	MN	Absaloka	5,851	8,704	0.64	9.2	95.58	$ 16.64	700	$ 0.020	$ 14.00	$ 2.64		912	8,716	0.63	9.2	115.65	$ 20.16	$ 14.00	$ 6.16	S&C-06/07	$ 5.85
3	Northern States Power	King	MN	Absaloka	351	8,727	0.63	9.07	113.66	$ 19.84	750	$ 0.020	$ 15.00	$ 4.84		164	8,708	0.58	9.1	115.36	$ 20.09	$ 15.00	$ 5.09	C-12/06	$ 4.84
4	Minnesota Power	Clay Boswell	MN	Decker	777	9,417	0.37	4.5	97.14	$ 18.30	750	$ 0.019	$ 14.25	$ 4.05		555	9,444	0.40	4.5	105.07	$ 19.85	$ 14.25	$ 5.60	C	$ 5.32
4	Minnesota Power	Clay Boswell	MN	Spring Creek	867	9,273	0.34	4.2	100.12	$ 18.57	750	$ 0.019	$ 14.25	$ 4.32		693	9,211	0.36	4.5	106.08	$ 19.54	$ 14.25	$ 5.29	C	$ 5.03
4	Minnesota Power	Clay Boswell	MN	Rosebud	2,083	8,773	0.70	8.9	97.02	$ 17.02	750	$ 0.019	$ 14.25	$ 2.77		1,503	8,693	0.72	9.1	100.89	$ 17.54	$ 14.25	$ 3.29	C	$ 3.13
5	Minnesota Power	Syl Laskin	MN	Decker	408	9,468	0.37	4.4	106.07	$ 20.09	800	$ 0.019	$ 15.20	$ 4.89		265	9,413	0.37	4.3	117.79	$ 22.17	$ 15.20	$ 6.97	C	$ 6.63
6	Northern States Power	Bayfront	WI	Decker	55	9,465	0.32	4.1	153.39	$ 29.04	800	$ 0.019	$ 19.20	$ 9.84		34	9,487	0.32	3.9	151.63	$ 28.77	$ 19.20	$ 9.57	S	$ 9.09
7	Marquette Bd of Light and Power	Shiras	MI	Spring Creek	197	9,321	0.32	4.1	133.61	$ 24.91	800	$ 0.019	$ 19.70	$ 5.21		64	9,309	0.31	4.3	142.35	$ 26.50	$ 19.70	$ 6.80	C	$ 6.46
8	Detroit Edison	St Clair	MI	Decker	2,552	9,515	0.37	4.5	146.04	$ 27.79	800	$ 0.019	$ 21.70	$ 6.09		1,036	9,478	0.38	4.4	125.30	$ 23.75	$ 21.70	$ 2.05	S	$ 1.95
8	Detroit Edison	St Clair	MI	Spring Creek	1,458	9,330	0.33	4.1	91.36	$ 17.05	800	$ 0.019	$ 17.05	$ -		772	9,295	0.32	4.3	96.41	$ 17.92	$ 17.05	$ 0.88	C-12/06	$ 0.83
9	Detroit Edison	Belle River	MI	Decker	2,452	9,515	0.37	4.5	146.03	$ 27.79	800	$ 0.019	$ 21.70	$ 6.09		996	9,477	0.38	4.4	125.61	$ 23.81	$ 21.70	$ 2.11	S	$ 2.00
9	Detroit Edison	Belle River	MI	Spring Creek	1,401	9,330	0.33	4.1	91.36	$ 17.05	800	$ 0.019	$ 17.05	$ -		742	9,296	0.32	4.3	96.80	$ 18.00	$ 17.05	$ 0.95	C-12/05	$ 0.90
10	Detroit Edison	Trenton Channel	MI	KY, PA & WY	1,418	10,850	0.68	6.0	135.25	$ 29.35	800	$ 0.019	$ 17.30	$ 12.05		1,310					$ -				$ -
	Sub Total				20,312									$ 4.61		16,092	annualized total						$ 3.82		$ 3.53
	Other potential customers:																								
	Consumers Energy	B.C. Cobb		Rosebud	929	9,045	0.50	6.7	128.28	$ 23.21						464	9,004	0.47	6.8	$ 128.23					
		Colstrip		Rosebud	6,378											3,867	8,495	0.67	9.5						
	Salt River Project	Coronado	AZ	Spring Creek	71	10,850	0.68	6.0	135.25	$ 29.35						167	9,327	0.32	4.0	$ 144.15				C&S	
	TVA	GRT Terminal		Spring Creek	243											262									
	Montana-Dakota Utilities	Heskett		Rosebud	79	8,678	0.49	7.3	123.96	$ 21.51						83	8,678	0.77	9.4	$ 136.17				spot	
	Consumers Energy	J.C. Weadock		Rosebud	239	9,034	0.50	6.7	123.77	$ 22.36						302	9,008	0.48	6.8	$ 118.50				C-12/09	
	KP&L, A Western Resources Co	Lawrence	KS	Spring Creek	246	8,979	0.33	6.90	108.75	$ 19.53						-									
	Montana-Dakota Utilities	Lewis & Clark		Rosebud	15	8,700	0.72	9.0	127.20	$ 22.13						3	8,700	0.72	9.0	$ 139.70					
	Wisconsin Power & Light	Nelson Dewey		Spring Creek	307	9,354	0.32	4.0	112.00	$ 20.95						240	9,362	0.32	4.1	$ 127.99					
	Wisconsin Power & Light	Presque Isle		Spring Creek	466	9,103	0.28	4.4	110.64	$ 20.14						274	9,059	0.28	4.9	$ 117.21					
	Northern Indiana Public Service	Rollin Shahfer		Spring Creek	55	9,257	0.32	4.2	148.30	$ 27.46						39	9,330	0.35	4.1	$ 167.17					
	United Power Association	Stanton		Spring Creek	266	9,228	0.49	7.3	100.59	$ 18.56						442	9,285	0.33	5.4	$ 96.76	C				
	KP&L, A Western Resources Co	Tecumseh	KS	Spring Creek	105	8,979	0.33	6.9	108.80	$ 19.54						-									
	Monongahela Power	Willow Island		Spring Creek	8	11,586	1.33	8.0	179.02	$ 41.48						-									
	Sub-Total				-	9,407										10,529									
	Total					29,719										26,621									
	Total ex Colstrip					23,341										19,992									

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	Anualized
Absaloka	6,142
Rosebud	10,665
Decker	4,947
Spring Creek	7,135

Plant ID No.	Plant Name
1	Hoot Lake
2	Sherco Plant
3	Allen S. King Plant
4	Boswell Energy Center
5	Laskin Energy Center
6	Bayfront
7	Shiras
8	St. Clair Power Plant
9	Belle River Power Plant
10	Trenton Channel Power Plant

Great Northern Properties, LLP

Figure 4.1
Otter Creek Property
Power Plant Locations

DATE: 11/16/05
FILE: CoalPowerPlants

PROJECT
3187

The data in this table is derived from FERC data. It is, from our experience, the best data available but not much audited for accuracy of reporting nor input into their database. Columns 'J' and 'T', for instance, show the delivered price per million Btus. When we subtract our best estimate of loadout, rail, and in some cases loadout to barge and barge transportation costs, the resulting FOB mine prices vary widely and are, in some cases, negative. Averaging these resulting prices, as shown at the bottom of columns 'Q' & 'W', produces apparently unrealistic FOB prices. In further work on the mine feasibility, special focus should be directed to these elements.

Note that the column titled Contract/Spot in Table 4.1 indicates whether a power plant is being supplied via contracts or spot sales. We anticipate that the new prices on expiring contracts will be increased by $4.00 to $7.00 per ton plus any increased rail or barge costs. The spot market sales in 2005 to Detroit Edison's lakeside plants shows an upturn of about $5.50 per ton over 2004 spot prices.

The volume of coal shipped from Montana to the high sodium-accepting power plants is only about 20 million tpy. Careful effort developing a solid market strategy will be necessary to determine how best to nudge into this market without destroying whatever price discipline, if any, currently exists.

The second group of power plants in Table 4.1 are (or were) also served by Montana mines neighboring Otter Creek, including Rosebud, Absaloka, Decker, and Spring Creek

All these mines have been operating for many years and are experiencing higher stripping ratios in the range of 3-4:1 at Spring Creek, climbing up to 9:1 and higher at Decker. These higher strip ratios put these mines at a disadvantage with respect to Otter Creek's projected operating costs, as they each must move more waste to uncover the same amount of coal as at Otter Creek. This higher cost, however, will be offset by Otter Creek's higher capital recovery / depreciation costs.

SYNFUEL PLANTS

Another important potential market for GNP coal is synthetic fuels. Very few properties contain such a huge coal reserve and at such an attractive stripping ratio (less than 3:1). Otter Creek could be considered an ideal property for a large scale synfuel plant.

This would probably entail attracting a large energy company with adequate financial capability to construct a mine mouth conversion plant at Otter Creek. Companies like Shell Oil, ConocoPhillips, Chevron-Texaco and ExxonMobil fit this profile. They would possibly be attracted by the large reserve base of Otter Creek.

TRANSPORTATION

At present there are no established transportation links to the Otter Creek property. Barring more rapid than anticipated construction of the Dakota Minnesota & Eastern railway, the product coal would likely get to market by rail or truck/rail.

RAIL

Sized product coal would be loaded at the mine into trains which would travel via a rail spur to the line at Colstrip, located about 38 rail miles distant. From Colstrip the trains would continue on to their final destination, a power plant among those shown in the prior figure and table. This alternative would require the construction of:

- Typical coal crushing, storage and loadout facilities at the mine to accommodate 12,000-ton unit trains
- A 38-mile rail spur from the mine to Colstrip to connect to the mainline.

Normally, the construction cost of the spur would be funded by the BNSF with the cost then rolled into the freight tariff. Alternatively, the construction cost could be funded by the mining company(ies) who should receive a corresponding (slight) tariff reduction to cover the railroad's avoided capital cost. The construction cost of the rail spur to Colstrip is estimated to be about $78 million[4].

Working on the assumption that the construction would be funded by the railroad, we estimate the freight rate to be 21 mills per ton/mile for a hypothetical 600 haul to the nearest power plant. The freight cost for the 600 mile journey would cost optimistically about $12.60/ton.

TRUCK/RAIL

Sized product coal would be loaded at the mine into trucks which would travel about 50 miles on existing highways (including the towns of Ashland and Lame Deer) to the nearest access point to the mainline at Colstrip where the coal would be transferred onto

[4] Based on the work performed by TransSystems Corporation (included in the "Tongue River Feasibility Report" prepared by Resource Data International, dated October 1997). Norwest escalated the 1997 capital cost estimates by 2.5% per year.

trains for the final leg to the recipient power plant. This alternative is more complex and would require the construction of:

Coal crushing, storage and loadout facilities at the mine to accommodate the loading of highway trucks with capacity of about 40 tons.

Truck unloading, storage and loadout facilities at Colstrip to accommodate the loading of unit trains.

The construction cost of the unloading, storage and loadout facilities at Colstrip is estimated to be between $5-10 million. Assuming a work schedule of 350 working days per year, 24 hours per day, about 30 trucks per hour would be needed to move the production of 10 million tons per year. This is equivalent to one loaded truck every two minutes.

The budget trucking rate for the 50-mile haul to Colstrip is $0.16/ton mile[5]. Therefore, the cost of the leg to Colstrip would be about $6.40/ton. The balance of the 600 mile journey would cost $11.87/ton for a total of $18.27/ton delivered to the power plant.

CONCLUSION

Norwest does not believe that trucking the coal to Colstrip is a viable option for the following reasons:

Unacceptable Environmental and Social Impacts

As stated above, a loaded truck would pass through the communities of Ashland and Lame Deer about every two minutes. However, every two minutes an empty truck would also pass through the towns. This means that, on average, a coal truck would pass through the towns every minute of the day and night.

Norwest believes the impacts of this traffic on local schools and other aspects of the communities would be unacceptable and that approvals would not be granted.

[5] Provided on September 29, 2005 by Mr. Ken Moizer, Sales Director, Savage Industries, a coal transportation company.

Unattractive Economics
The higher road transportation cost ($5.67/ton) results in a yearly penalty of about $56.7 million which means that the $77 million capital cost of the rail spur (plus the $5-10 million cost of the additional facilities at Colstrip) would be offset in less than two years.